English

Please read this Manual Carefully before installing the Receiver

User's Manual

HD-300 COMBO

Innovation

your life Style&Quality

VISION DIGITAL RECEIVER

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To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.

GENERAL SAFETY

WARNING

Please read the following recommended instructions carefully to avoid the risk of your physical Injury before the product is operated.

Do not cover the receiver and keep clear space around the receiver for sufficient.

Check the receiver's operation voltage 90~250V, 50Hz~60Hz Max, 40W Keep liquid away from the receiver.

The receiver shall not be exposed to dripping or splashing and no objects that filled with liquid shall not be placed on the receiver.

Unplug the receiver from the wall outlet before cleaning.
Use a soft cloth and a mild solution of washing-up liquid to clean the casing.

Do not block the receiver's ventilation slots which are provided for ventilation and protection from overheating.

Please maintain the receiver in a free airflow.

Do not allow the receiver to be exposed to hot, cold or humid condition.

Do not use any cable and attachment that are not recommended as these may damage your equipment.

Please unplug the receiver from the wall outlet and disconnect the cable between the receiver and the antenna when you will not use it for long time.

Do not remove the cover to reduce the risk of electric shock.

Do not attempt to service the receiver yourself.

Refer all serving to qualified service personnel.

Manual may be updated as new features.

GENERAL INFORMATION

I. UNPACKING

Please ensure that the following items are included with the receiver in your packing.

1) Remote Control Unit (RCU)

2) Batteries (2EA)

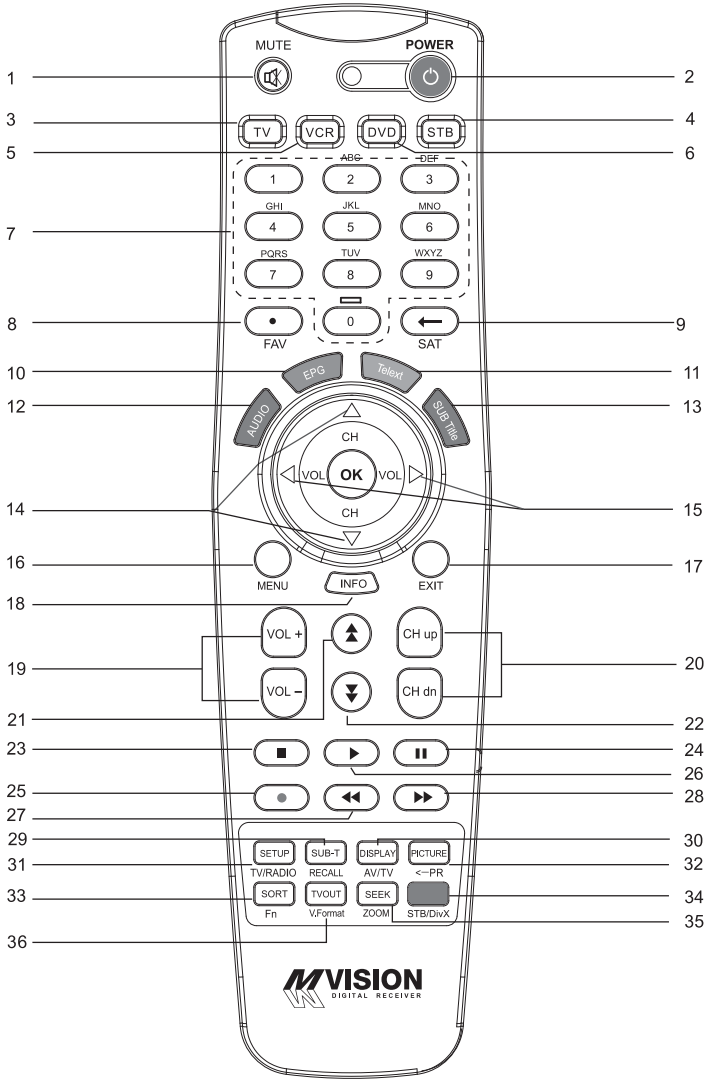
3) User's Manual

4) A/V Cable

II. FEATURES

- Supports MPEG-2, MPEG-4, H.264 and fully DVB compliant.
- Satellite & Terrestrial combo receiver.
- 2 Slots common interface for Viaccess, Irdeto, Cryptoworks, Nagravision, Conax, Mediaguard and etc.
- 1 Slot smart card.
- DiSEqC 1.0, 1.1, 1.2 and USALS.
- Aspect ratio adjustment 4:3 (16/9 crop), 4:3 (16/9 letterbox), 16:9 (4/3 pillar box).
- User friendly OSD and operation.
- Total 5,000 Channels Programmable.
- Multi-language audio support
  Multi-language menu text support.
- Favorite channel selections.
- Parental Guide and rating control.
- EPG(Provider Electronic Program Guide) for On Screen Channel Information.
- On-Screen Display with 16 bit Color.
- Zoom Function in Pause.
- Dolby Digital Bitstream Out through S/PDIF(Optical & Coaxal).
- Seletable output for 1080i, 720P, 576P and 576i format.
- Multiple Video Outputs "HDMI, Component(YPbPr), SCART(RGB, CVBS)".
- USB 2.0 Host (Access to HDD, USB memory, Others etc).
- Upgrade Software & Update Channel Database through USB 2.0 Port.

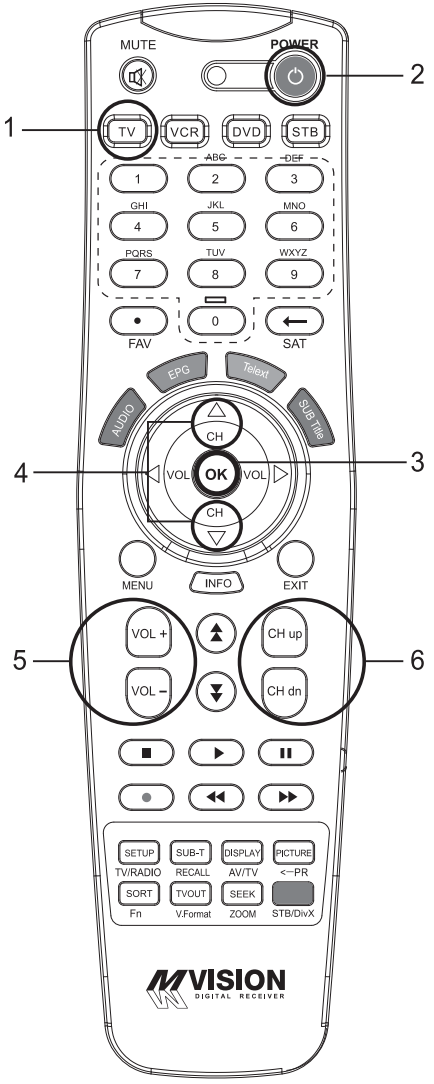
III. REMOTE CONTROL UNIT (RCU)



III. REMOTE CONTROL UNIT (RCU)

1. MUTE	Enables or disables the audio.
2. POWER	Swithches the receiver between operation and standby mode.
3. TV	TV mode.
4. STB	STB mode.
5. VCR	VCR mode.
6. DVD	DVD mode.
7. Numeric buttons	Selects the TV or Radio service channels and individual menu.
8. FAV	Toggles the selected favorite mode.
9. SAT	Toggles the selected Satellite list.
10. EPG (Electronic Program Guide)	Displays the TV or Radio program guide.
11. Teletext	Enables teletext mode.
12. Audio	Changes the audio languages.
13. Subtitle	Enables subtitle mode.
14. ▲▼	Changes channels or moves to the item in the menu.
15. ◄ ►	Adjusts the volume or moves to left or move item in the menu.
16. MENU	Displays the main menu on screen.
17. EXIT	Returns to the previous menu or normal viewing mode from a menu.
18. INFO	Displays the program information box on the screen and edit the name of favorite channel list.
19. V+/V-	Turns volume up or down.
20. P+/P-	Changes channels up or down on normal mode.
21.	Moves up a page in the channel list.
22.	Moves down a page in the channel list.
23. STOP	Stops recording or playing.
24. PAUSE	Pauses the playing picture or go to normal mode.
25. Record	Records the program.
26. Play	Displays file lists and plays slow/normal.
27. Rewind	Stars reverse playback and changes the speed of reverse playback.
28. F/F	States fast forward or fast motion playback and changes the speed of forward playback.
29. RECALL	Selects the previously viewed channel.
30. AV/TV	Selects the TV or AV mode.
31. TV/RADIO	Switches between TV and Radio.
32. ←PR	Reserved.
33. Fn	Reserved.
34. STB/DivX	Reserved.
35. ZOOM	Selects ZOOM IN/OUT.
36. V.Format	Switches to HD Type.

IV. HOW TO SETTING RCU FOR TV



IV. HOW TO SETTING RCU FOR TV

1. Manual Search

At first, Turn on the TV

1

3

1) Press **"OK" key** and **"TV LED Lamp"** in RCU at the same time for more than 2 or 3 seconds.
Then the **"TV LED Lamp"** will turn on/off 2 times (will be twinkled 2 times).

2) Find the the TV code in Brand List (the code is composed of 3 digits) and insert the 3 digits.
(If the 3 digits were inserted correctly, **"TV LED Lamp"** will be twinkled 2 times and TV **will be turn off ==→ go to 3)-1.**
but if the codes were inserted wrong the **"TV LED Lamp"** will be twinkled long only 1 time and TV will be kept turning on) ==→ **go to 3)-2.**

==→ In this step, you should insert 3 digits of code with 10 seconds. If not this setting process will be failed.

2

5

3) - 1 If TV turns off, press "OK" Key and TV LED Lamp will be twinkled 2 times again.
Please turn on the TV using **"Power button"** in RCU and check **volume key** and

6

channel Key or any other keys of RCU whether they working properly If the power buttons works but other keys does not work, it means the code was not inserted correctly.
Please start again from the step 1) and insert other code of the TV Brand. Normally TV brand has several codes, not unique.

3) -2 Please start again from the step 1) and insert other code of the TV Brand. Normally TV brand has several codes not unique.

2. Auto Search

At first, Turn on the TV

1) Press **"OK" key** and **"TV LED Lamp"** in RCU at the same time for more than 2 or 3 seconds.
Then the **"TV LED Lamp"** will turn on/off 2 times (will be twinkled 2 times).

4

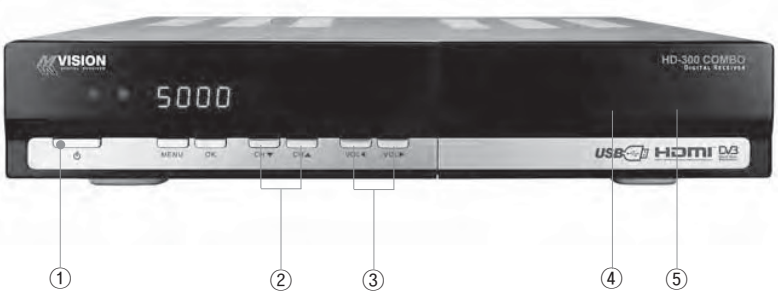
2) Press the **UP or Down Key** until the TV turns off.

3) When the TV turns off, press the **OK** key and the **TV LED Lamp** will be twinked 2 times.

4) Please turn on the TV using **"Power button"** in RCU and **check volume key** and **channel Key** or any other keys of RCU whether they working properly.

5) If the power buttons works but other keys does not work, it means the auto serching was not done properly Pleaes start again from step 1) to step 4) until all keys of RCU works well.

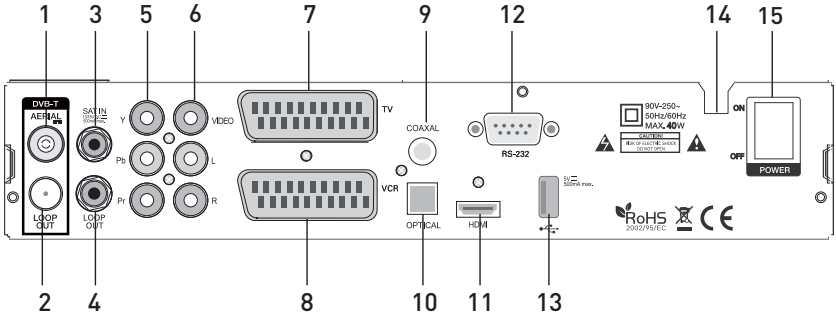
V. FRONT PANEL



1. POWER	Switches the receiver power On and Standby.
2. CH Up/Down	Channel up / down or selects the item of Menu.
3. VOL Up/Down	Volume up/down or selects the item of Menu.
4. SMART SLOT	Insert Smart Card.
5. CI SLOT	Insert CAM.

"All USB 2.0 flash drive may not be compatible with the product"

VI. REAR PANEL



1. AERIAL	Connects to Terrestrial antenna cable.
2. LOOP OUT	Connects to another STB.
3. SAT IN	Connects to Satellite antenna cable.
4. LOOP OUT	Connects to another STB.
5. YPbPr	Connects to Component jack of TV.
6. VIDEO	Connects VIDEO to the TV or other eguipment.
7. TV SCART	Connects to TV SCART cable.
8. VCR SCART	Connects to VCR SCART cable.
9. COAXAL	Output for connecting to a amplifier.
10. OPTICAL	Output for connecting to a amplifier.
11. HDMI	Connects to HDMI jack of TV.
12. RS 232	Connects to personal computer for software upgrade.
13. USB	Connects to USB device.
14. POWER SUPPLY	90~250V AC, 50/60Hz, 40W.
15. POWER BUTTON	Turns On/Off.

INSTALLING EQUIPMENT

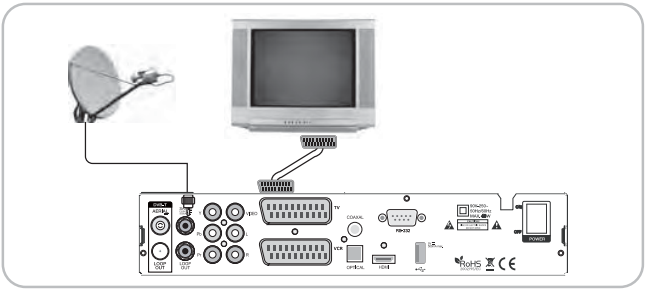
This section explains several ways of connecting the receiver to your existing TV, VCR and Hi-Fi system.

You can choose one of the following setups that we recommend.
If you have any problem or need help, consult your dealer or service provider.
Please ensure that the following items are included with the receiver in your packing.

I. CONNECTING THE RECEIVER TO TV

I-1. Connecting the receiver to TV with the SCART cable

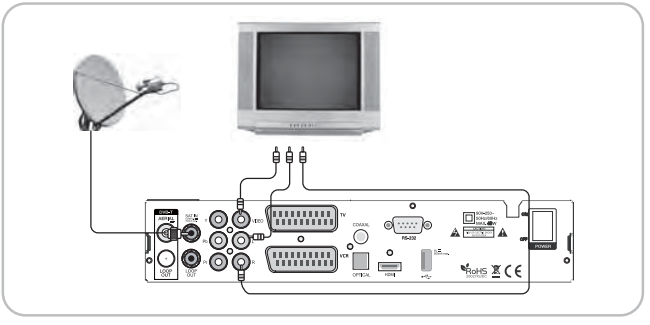
Connect one end of the SCRAT cable to the TV SCRAT cocket on the rear panel of the receiver and the other end to a SCRAT socket on the TV.



II. CONNECTING THE RECEIVER TO TV WITH CINCH CABLE

II-1.Connecting the receiver to TV with the CINCH cable

Connect one end of the CINCH cable to the Audio-R(Red), the Audio-L(White)and the Video (Yellow) socket on the rear panel of the receiver and and other end to the Audio-R(Red), the Audio-L(White) and the VIDEO(Yellow) socket on the TV.

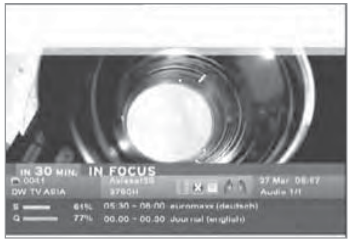


CHANNEL LIST GUIDE

1. Normal Live Mode

a) When you select one channel, information bar appears automatically on the screen for few seconds. This bar provides you the current channel information.

b) Press INFO button to see the information during normal live mode.



2. Simple Channel List

a) Press OK on the normal live mode to go to the channel list.

b) When detail channel list is displayed on screen press RED button to go to simple channel list.

3. Detail Channel List

a) Press OK on the normal live mode to go to the channel list.

b) When simple channel list is displayed on screen press RED button to go to detail channel list.

c) Press ◀ ▶ and ▲▼to sort by Alphabet.

d) Press SAT button to sort by Satellite and FAV button for Favorite 1~8.

e) Press GREEN button to return to All Channel or EXIT to return to the current live channel.

f) Press the SAT key to show Satellite Pop-UP Window then select satellite. Channel list of selected satellite will be displayed.

g) Press the FAV key to show Favorite Pop-UP Window then select FAV list. Channel list of selected FAV will be displayed.

h) Press the Green key then all searched channel list will be displayed.

CHANNEL LIST GUIDE

4.EPG (Electronic Program Guide)

a) Press EPG button on the live mode.

b) EPG of the current channel appears on the screen.

c) Select the channel that you want to watch program.

d) It will be appear like rightside picture.

5. ZOOM IN/OUT

a) By pressing ZOOM key in a normal live mode, you can use Zoom In/Out fuction.

b) You can select zoom size with RED/GREEN key.

c) You can select the start position with ▲▼◀ ▶ key.

d) After select Zoom size and pisition, you can start zoom function with OK key.

e) With ▲▼◀ ▶ key, you can move zooming screen.

MENU GUIDE

MAIN PAGE

Press the MENU button on the RCU to open Main Page on the screen. Main Page will be displayed.

1. You can move into the main page using ▲▼◀ ▶ on the RCU.
2. Press OK to confirm your selection.
3. Press EXIT to return to the previous menu or press MENU to go to the current live channel.

I. Channel Manager
II. Installations
III. Options
IV. Utility
V. Accessory

I. CHANNEL MANAGER

This section may help you to organize channels according to your preference.

1. Select Channel Manager in the Main Page with ▲▼ and press OK.
2. TV Channel Manager Page displays on the screen.
3. Select the mode that you want using ◀ ▶.
4. To see the channel that you choose, go to the channel and then press RED botton.
5. Press EXIT to return to the previous menu or press MENU to go to the current live channel.

I-1. Favorite
I-2. Rename
I-3. Move
I-4. Lock
I-5. Delete

I-1. Favorite

1. Using ◀ ▶ go to the Favorite mode then press YELLOW button to choose Favorite 1~8.
2. Press OK on the channel that you want to add or delete.
3. ☆ will be marked at the end of selected channel name bar. To delete press OK again.
4. Selected channels will be automatically saved.
5. If you want to check the saved Favorite Channel List go to other mode(Rename~Delete) except Favorite and then press FAV button to check Favorite 1~8.
6. Press EXIT to return to the previous menu or press MENU to go to the current live channel.
7. Press BLUE button to rename Favorite.

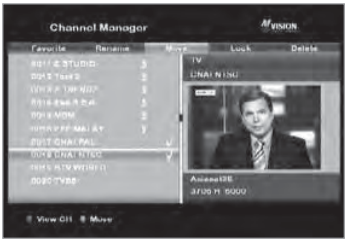
I. CHANNEL MANAGER

I-2. Rename

1. Using ◀ ▶ go to the Rename mode.
2. Select the channel that you want to rename using ▲▼ and then press OK.
3. Keypad Dialog displays on the screen.
4. Edit the name entering NUMBERS and / or WORDS in the Keypad Dialog.
5. Press EXIT to return to the previous menu or press MENU to go to the current live channel.

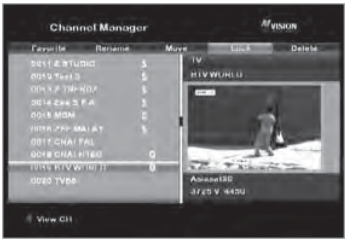
I-3. Move

1. Using ◀ ▶ go to the Move mode.
2. Select channels which you want to move by pressing OK key.
3. Move cursor that you want to place on than press GREEN button.
4. Press EXIT to return to the previous menu or press MENU to go to the current live channel.



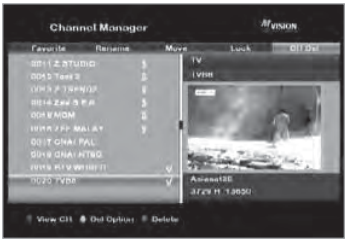
I-4. Lock

1. Using ◀ ▶ go to the Lock mode.
2. Select the channel that you want to lock and then press OK. will be marked at the end of the selected channel name bar. To delete press OK again.
3. Press EXIT to go to Main Page or press MENU to go to the current live channel.



I-5. Delete

1. Using ◀ ▶ go to the Delete mode.
2. Select the channel that you want to delete and then press OK. will be marked on the selected channel number. To delete press Blue button again.
3. Press YELLOW button to delete TP. Select one channel and press Blue button. All channels of that TP will be automatically selected.
4. Press YELLOW button to delete Satellite. Select one channel and press Blue button. All channels of that the Satellite will be automatically selected.
5. Press EXIT to return to the previous menu or press MENU to go to the current live channel.
6. Message Box displays on the screen.
7. Select OK on the Message Box and then press OK to delete the markedchannels.

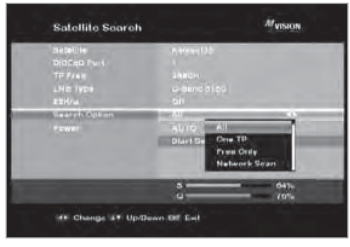


II. INSTALLATION

This section may help you to set up antenna and scan satellite or transponder, etc. Select Installations in Main Page using ▲▼ and press OK.

Press EXIT to return to the previous menu or press MENU to go to the current live channel.

II-1. Satellite Search
II-2. DiSEqC Switch
II-3. Motor Setup
II-4. Terrestrial Search
II-5. Factory Default



II-1 Satellite Search

1.You can move the cursor using ▲▼ and press OK when you select the value that you want.

a) Satellite
- Press OK to display the Satellite List Box.
- Select the proper Satellite and then press OK.

b) DiSEqC
- Press OK to display the DiSEqC Port List.
- Select the proper DiSEqC port and then press OK.

c) LNB
- Press OK to display the LNB Frequency List.
- Select the proper LNB Frequency and then press OK.
- You can also input directly the numbers using NUMBER KEY on the RCU.

d) 22KHz Tone
- Select the one among None, 0 KHz or 22 KHz depending on the user's antenna switch box.

e) Search Option
- Press OK to display the Search Option list.
- Select the Search Option that you want and then press OK.

f) Search
- Press Search to start scan channels.
- SAT Rename : To rename SAT, Press the Green button on the RCU.

※ TP EDIT : To Edit TP, Press the RED button on the RCU.

II. INSTALLATION

II-2. DiSEqC Switch

1. Select Channel Search in Installation using ▲▼ and press OK.

a) If you select DiSEqC Switch and press OK on the menu will be, DiSEqC Switch Page will be displayed.

b) Select the proper Satellite of each DiSEqC port (A~D) using ◀ ▶ and ▲▼ and press SEARCH. Selected Satellites will be searched automatically.

II-3 Motor Setup

1. You can move the cursor using ▲▼ and press OK when you select the value that you want.

a) Motor Type : DiSEqC 1.2, USAL

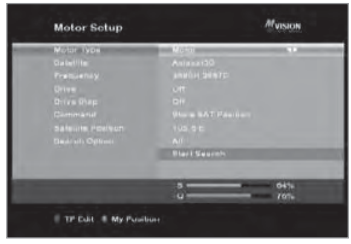
- Press OK to display Motor Type
- Select the proper Motor Type and then press OK.

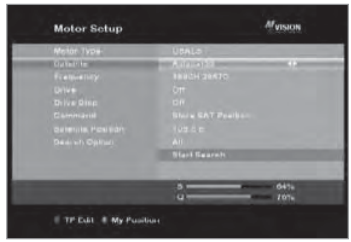
b) Satellite
- Press OK to Display the Satellite List Box
- Select the proper Satellite and then press OK.

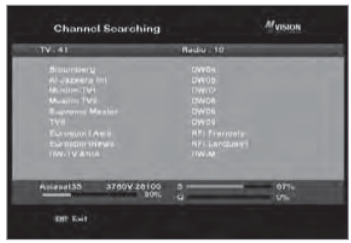
c) Drive & Driver Step
- Select the direction using◀ ▶(WEST/EAST).

d) Frequency
- Press OK to Display the Frequency List.
- Select the proper Frequency and then press OK.

e) Motor Movement
- Search the appropriate position of the selected Satellite using◀ ▶.





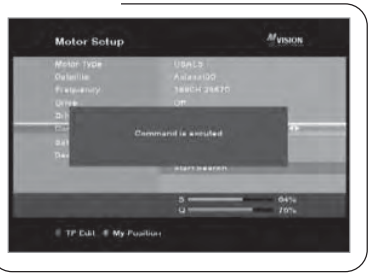


II. INSTALLATION

f) Motor Control

Select the position using ◀ ▶ and then press OK.
Message box displays on the screen.

- **Store Sat position** : Stores the current position of the motor for the selected satellite.
- **Goto Sat Position** : Moves the motor to the stored position of the selected satellite.
- **Goto Center** : Goes to the center of the motor.
- **Limit off** : disable East, West limit.
- **Set East Limit** : Set current position as East Limit.



- **Set West Limit** : Set current position as West Limit.
- **Recaluation Position.**
- **Reset Position** : Resets all stored position of the motor.

g) Satellite Position

- Input directly the position using NUMBER KEY on the RCU
- Select the direction using ◀ ▶ (WEST / EAST).

h) Search Option

- Press OK to display the Search Option list.
- Select the Search Option that you want and then press OK.

i) Search

- Press Search to start scan channels.
- Press OK to start scanning.

※ **TP EDIT : To Edit TP Press the RED button on the RCU.**

2. Edit my local position

- Press Green Button to edit local Position.

a) Longitude

- Input directly the Longitude using NUMBER KEY on the RCU.
- Select the direction using ◀ ▶ (WEST / EAST).

b) Latitude

- Input directly the Latitude using UNMBER KEY on the RCU.
- Select the direction using ◀ ▶(NORTH/SOUTHd).

3. Press EXIT to return to the previous menu or press MENU to go to the current live channel.

II. INSTALLATION

II-4. Terrestrial Search

1. Select Channel Search in Installation using ▲▼ and press OK.
2. 1) Select the region where you are using ◄ ►.
   2) You can select searching type which you want among Auto and Manual using◄ ►.

   3) Auto

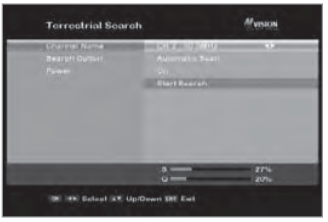
   a) Select 'Search'on the Screen and pres OK button to scan channels.

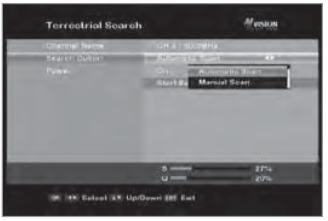
   b) Press Exit or Menu after finishing scanning.

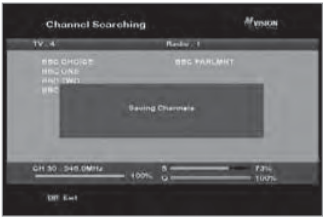
   4) Manual

   a) Select Mux Channel which you want using ◄ ►.

   b) Frequency will be displayed automatically according to selected Mux Channel.





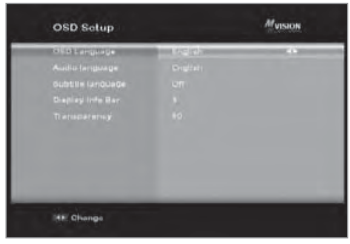


II-5. Factory Default

Use Factory Default function only when you want to return the receiver to the condition of factory default. All settings and channels will be deleted.

1. Select Factory Default in Installations using ▲▼ and press OK.
2. Message box displays on the screen.
3. Select OK to return the receiver to the condition of factory default and then press OK.
4. Press EXIT to return to the previous menu or press MENU to go to the current live channel.

III. OPTIONS



This section may help you to set up OSD language, time, etc. Select Options in Main Page using ▲▼ and press OK.
Press EXIT to return to the previous menu or press MENU to go to the current live channel.

III-1. OSD Setup
III-2. Control Panel
III-3. Time Adjust
III-4. Parental Lock

III-1. OSD Setup

1. Select OSD Setup in Options using ▲▼ and press OK.

a) OSD Language
- Press OK to display OSD Language list.
- Select the language that you want and then press OK.

b) Audio Language
- Press OK to display Audio Language list.
- Select the language that you want and then press OK.

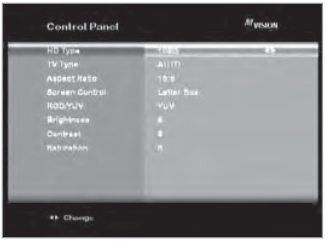
c) Subtitle Language
- Press OK to display Subtitle.
- Select the language that on want and then press OK.

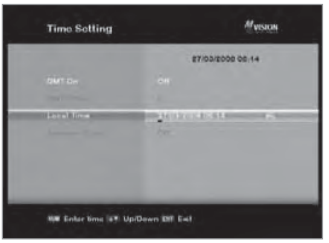
d) Display Info Bar
- Press OK to display Display Info Bar time list.
- Select the second that you want to display and then press OK.

e) Transparency
- Adjustment of transparency level.

2. Press EXIT to return to the previous menu or press MENU to go to the current live channel.

III. OPTIONS





III-2. Control Panel

1. Select TV Setup in Options using ▲▼ and press OK.

a) HD Type
- Select HD video Output.

b) TV Type
- Select your TV type.

c) Aspect Ratio
- Select screen ratio.

d) Screen Control
- Select screen display modes.

e) Brightness
- Adjustment of screen brightness.

f) Contrast
- Adjustment of screen contrast.

g) Saturation
- Adjustment of screen Saturation.

2. Press EXIT to return to the previous menu or press MENU to go to the current live channel.

III-3. Time Adjust

Set your local time according to your location.

1. Select Time Setup in Options using◀ ▶ and press OK.
2. Time Adjust page displays on the screen.
3. Move the cursor using◀ ▶, ▲▼and press OK when you select the value that you want. (Input Hour directly using number keys on the RCU)
4. Press EXIT to return to the previous menu or press MENU to go to the current live channel.

III-4. Parental Lock Setup

1. Select Parental Lock Setup in Options using◀ ▶ and press OK.
2. Parental Lock Page displays on the screen.
3. You can lock and unlock Parental Lock selecting ON or OFF using ◀ ▶ (For Channels).
4. You can lock and unlock Install Lock selecting ON or OFF using ◀ ▶ (For Installation Settings).
5. Enter new password if you want to change the current password.
6. Confirm your new password entering new password again.
7. Press EXIT to return to the previous menu or press MENU to go to the current live channel.

Note. DEFAULT PASSWORD IS 0000

VI. UTILITY

This section may help you to use USB, etc.
Select Utility in Main Page using ▲▼ and press OK.

- VI -1. System Information
- VI -2. Timer
- VI -3. Calendar

VI-1. System Information

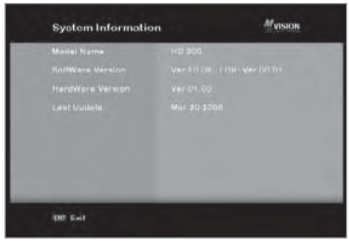
This option help you to know the current S/W and H/W version. Also provides you the product name.

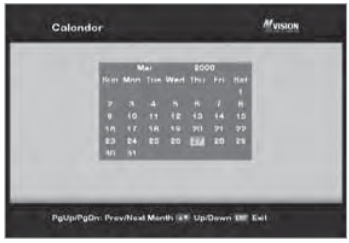
1. Select System Information in Options using ▲▼and pres OK.
2. Press EXIT to return to the previous menu.

VI-2. Timer

The Unit(Set top box) will be turned off/on automatically after a specified time

VI-3. Calendar

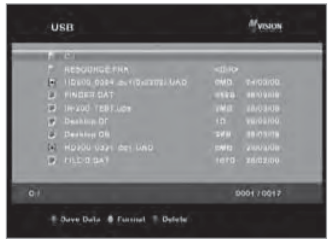




V. ACCESSORY

This section may help you to use USB, etc.
Select Utility in Main Page using ▲▼ and press OK.

- V -1. USB
- V -2. Common Interface



V-1 USB

The receiver is equipped with host.

1. Select USB in Utility with ▲▼ and press OK.
2. If you want to save Sofware or Database, press Green button on the RCU.
3. Select the file which you want to save using ▲▼ and OK button.
4. After downloading the selected file, the receiver will reboot automatically.

V-2 Common Interface

The receiver is equipped with one slot of Common Interface which have access to the scrambled the pay per view services with various conditional access modules and a valid smart card.

The programs that can be descrambled are determined by the conditional access module and smart card that you use.

1. Select Common Interface in utility with ▲▼ and press OK.
2. Common Interface displays on the screen. (The phrase 'No Module' is indicated when the conditional access module is not istalled)
3. Insert the conditional access module into Slot 1.
4. The name of the Slot differs according to each inserted conditional access module.
5. Press EXIT to return to the previous menu or press MENU to go to current live channel.

1. Recommended Device

- External USB Hard Disk Drive.
- Flash memory stick
- Format Type: FAT16/32 (System does not support NTFS and other file system)

2. Recording Function

2.1 Reserved Recording

2.1.1 Time Reserved Recording

: Set desired recording time- in "Utility --> Timer" to record at set time.

How to set up before you start "Time Record"

- STB set up in default as below.
- Please change "OFF" to "Recording" in Active menu.
- Once you set "Recording" in Active menu, you will see the detail menu for PVR.

(Cycle, Channel Type, Channel name, Start Time, Duration).

- Press the "Ok" button to select Channel Name.

2. Recording Function

2.1.2 EPG Reserved Recording

: Used to record a selected event from EPG.

- Press the EPG button to go into EPG menu while watching a program on screen.

- To select event play on time: Move from the EPG to select the event and press the "RECORD button" on RCU

- If you want cancellation, press more "RECORD button" once

- If you want several reserved recording, move and press the "RECORD button" on RCU

2.2 Instant Recording

- Press "RECORD button" on RCU to start recoding program.

- While Recoding program

- Press "PAUSE" key to execute "Time Shift"

- You can use "LEFT/RIGHT button" to view desired time while recoding program.

- Press "OK button" on RCU to display Recording file list

2.2 Instant Recording

During Recording you can watch also other channels which are located in same TP.

In case of watching other channels during recording,

You should come back to the recording channels in channel list to stop recording.

- If you press "STOP button" on RCU, current program you are watching will stop and Live TV will be stored in USB memory space.

3. Playback Function

- To play previously recorded program, press "Play button" on RCU.

- Use the arrow buttons to select the file which you want to play and press "OK button" to play

- While Playing program

- If you press "LEFT/RIGHT button" on RCU button while recoding live TV or recorded file play,

current program you ware watching will stop and picture will re-restart from where it was moved by "LEFT/RIGHT button" on RCU

If you want to play other recorded file during Playback, press "Play" button

4. Trick Mode Function

- If you press "FF(Fast Forward) button" during Timeshift or Playback, the file will be played at 2X speed and if you press the "FF button" one more time, the file will be played to 8X speed.

- If you press the "REW(Rewind) button" during Timeshift or Playback, the file will rewind at 2X

speed and if you press the "REW button" one more time, the file will rewind to 8x speed.

- FF/REW function will back to normal play if you press "PLAY button".

5. TimeShift Function

- If you want to execute "Time Shift" in Live mode

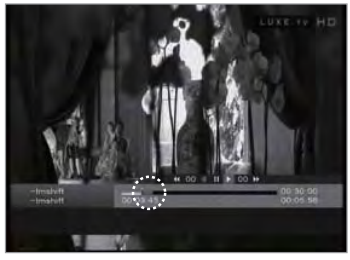
You should set "On" of Time Shift In PVR Option (Accseeory -→ PVR -→ TimeShift "ON")

- To star Time Shift in Live mode, press "PAUSE" to start.

- Time shift will played during 30 minutes in Live Mode.

- To start "Play back" during Timeshift press "PLAY" key

- You can move "play position" using LEFT/RIGHT button during Time Shift



6. Format

- You can do FAT32 Format the HDD formatted by FAT32 and NTFS also

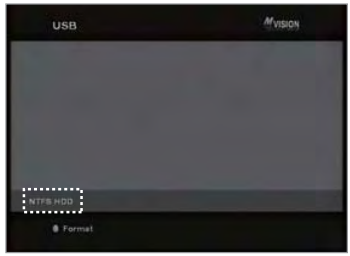
- You can do Format also the multi partitioned HDD

- When NTFS formatted HDD is inserted, below message will appear

- Press "OK" button to move to "C:, D:, E:, F: NEXT°" in case of Multi partitioned HDD

.

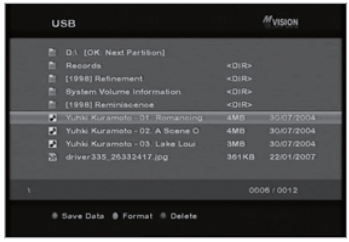
- In case of NTFS multi partitioned HDD, you must format by FAT 32



7. MP3 Play

- Select MP3 file which you want to play in USB menu.

- After you select MP3 file, MP3 play window will be executed.

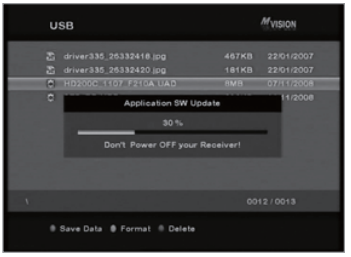


8. JPG Play

- Select JPG file which you want to see in USB menu.

- Press OK to see the JPG which you want to.

- You can rotate the image by using LEFT/RIGHT button.



9. S/W Up-grade

- Select * UAD file which you want to upgrade in USB menu

10. How to play 'the recorded file by PVR of HD-200" in PC or DivX Player

I. How to Play in PC

A) Play KM Player

B) Select Language

1) Click right button of Mouse --> Language --> your language

C) Change the extension name of the recorded file to *.mpg".

Example : Welcome to A_131821 --> Welcome to A_131821.mpg

D) Select the file which you want to play

1) Click right button of Mouse --> Open Files(S) --> Select

2. How to Play in "Divx Player"

A) The file format must be changed to ".avi" format to play in DivX Player

B) Select a destination folder where to be saved the file which will be changed to *.avi.

1) Click right button of Mouse --> Capture --> Select Capture Folder.

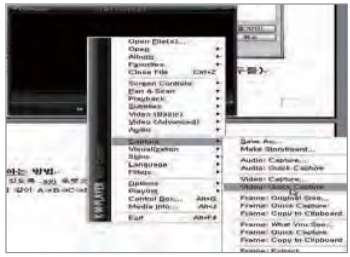
C) Repeat A) --> B) --> C) --> D) of No.1 how to play in PC

D) Capture the fie which is being played currently to convert into *.avi

1) Click right button of Mouse -->Capture --> Video Quick Capture.

2) Then the playing file is saved in designated folder by *.avi format

E) If the playing file is STB SD channel, it is saved by SD and If the file is HD or H.264 it saved by HD or H.264. If user does not have DivX player which can play HD or H.264 (at least CPU sigma8634), he must convert the file SD so that the general SD DivX player(CPU sigma8511) can play the file.



3. How to Convert the file by Divx Manager

A) Play Divx Manager

1) Setting -→ Model -→Rapsody RSH-250/350

B) Select the folder where the file that you want to convert is. Then the file's information will appear

C) And select the file which you want to convert and select "Convert".

D) Select "Encoding Start" -→ It starts "Converting".

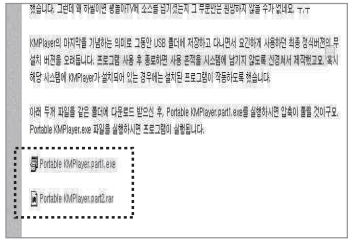
****** Web site for downloading**

1. Kmplayer

1) http://2bwithu.tistory.com/245

2) Download 2 files to 1 folder and unzip the archived file.
After unzip, you can install only

click exe file.



2. Divx Manger

1) Enter this site :
http://www.modix4u.co.kr/upboard/view.asp?fcprimkey=44

2) Click below for English version

TROUBLESHOOTING

Problem	Solution
Nothing appears on the Front Panel or No power supply	· Check that the power cable is plugged into the power socket.
No Picture	· Check the dish and adjust it. · Check the cable connection and correct it. · Check channel and video output.
No Sound	· Check the volume level of the TV and receiver. · Check the mute status of TV and receiver. · Check the cable connection and correct.
Remote Control Unit dose not work	· Replace batteries. · Aim the remote control unit directly to the receiver. · Checking that nothing blocks the front panel.
Service is not running or scrambled	· Check the Conditional Access Module and smart card are appropriate for the selected service. · Check the Conditional Access Module and smart card are correctly inserted or not.
"No Signal" on the screen	· Check the signal strength and the signal quality in the menu. · Check the LNB and replace the LNB if necessary. · Check the LNB cable. · Check the Dish and adjust it.
Tuner Defective Check	· Go to the Option and select System Information.
You have forgotten your secret PIN Code	· Contact your Service Provider.

SPECIFICATIONS

I.Conditional Access Module Interface

Item	Specification
SMART CARD	1 SLOT, ISO 7816, GSM11.11 and EMV (payment systems) compatibility
PCMCIA	2 SLOTS DVB Common Interface Standard (Viaccess, Irdeto, Nagra Vision, Conax, Crytoworks, AlpahCrypt..)

II. Tuner & Channel

Item	Specification
Type	1 × F Type, IEC169-24, Female
Frequency Rage	950MHz to 2150MHz
RF Impedance	75 Ohm unbanlanced
Signal Level	-65 to -25 dBm
LNB Power	13.5/18.5Vdc +/- 5%, 0.5Amax, Overload Protected
22KHz Tone	Frequency : 22KHz +/- 2KHz, 0.6Vpp +/- 0.2V
DiSEqC Control	Version1.0, 1.2, Tone burst A/B
Demodulation	QPSK, 8PSK
Input Symbol Rate	DVB-S QPSK : 2~45 Msps DVB-S2 8PSK/QPSK : 10~30Msps
FEC Decoder	1/2, 2/3, 3/4, 3/5, 4/5, 5/6, 8/9, 9/10 in DVB-S2 mode. 1/2, 2/3, 3/4, 5/6 and 7/8 in DVB-S mode.

III. Tuner & Channel(DVB-T)

Item	Specification
Type	IEC60169-2(VHF/UHF) female, 75? nominal
Frequency Rage	VHF : 170MHz to 230MHz UHF : 470MHz to 862MHz
Signal Level	-78.5dBm ~ -25dBm (64QAM, Code Rate 2/3, Guard Interval 1/8,Gaussian Channel)
COFDM Spectrum	COFDM 2K/8K-Carrier
FEC Mode	1/2, 2/3, 3/4, 5/6, 7/8

IV. System & Memory

Item	Specification
Main Processor	STi7100
Flash Memory	8 Mbytes
System Memory	128 Mbytes
A/V Memory	64 Mbytes
Channel Capacity	Digital Channel : 5,000
Front	7-Keys, 7-SEGMENT DISPLAY

SPECIFICATIONS

V. MPEG Transport Stream & A/V Decoding

Item	Specification
Transport Stream	13818-1 MPEG-2, H.264/AVC Transport stream Specification
Profile Level	MPEG-2 MP@ML, MP@HL, MPEG-4 H.264/AVC
Input Rate	Max. 90Mbit/s
Aspect Ratio	4:3, 16:9, Letter Box
Frame Rate	25Hz for PAL, 30Hz for NTSC
Video Resolution	576i, 576p, 720p, 1080i
Teletext	Through VBI or BSD
Audio Decoding	MPEG-1 Layer 1 & 2, Dolby Downmix
Audio Mode	Single Channel/Dual Channel Joint Stereo/Stereo
Frequency Response	20~20kHz, ←+/-2dB

VI. A/V & Date In/Out

Item	Specification
HDMI	HD Video/Audio Output
TV SCART Output	RGB, CVBS, L, R Output with Volume control
VCR Scart In/Out	RGB, CVBS, L, R In CVBS, L, R Out
RCA Output	CVBS, L, R Output(Yellow, White, Red Jack) with Volume Control Component Video(YPbPr) Out
SPDIF	Dolby Digital Bitstream Out(Coaxal, Optical)
Data Interface	- RS-232, Bit Rate : 115,200baud Connector : 9-pin D-sub Male type - USB : USB 2.0, Type A Connector

VII. Power Supply

Item	Specification
Input Voltage	AC 90V ~ 250V, 50Hz ~ 60Hz
Power Consumption	Max 40W
Protection	Separate Internal Fuse The input shall the lighting protection

VIII. Physical Specification

Item	Specification
Size(WxHxD)	290mm x 50mm x220mm
Weight	1.5 KG

IX. Environmental Condition

Item	Specification
Operating Temperature	0 °C ~ 40 °C
Storage Temperature	-10 °C ~ 50 °C
Operating Humidity Range	10~85% RH, Non-condensing
Storage Humidity Range	5~90% RH, Non-condensing

SPECIFICATIONS

I.Conditional Access Module Interface

Item	Specification
SMART CARD	1 SLOT, ISO 7816, GSM11.11 and EMV (payment systems) compatibility
PCMCIA	2 SLOTS DVB Common Interface Standard (Viaccess, Irdeto, Nagra Vision, Conax, Crytoworks, AlpahCrypt..)

II. Tuner & Channel

Item	Specification
Type	1 × F Type, IEC169-24, Female
Frequency Rage	950MHz to 2150MHz
RF Impedance	75 Ohm unbanlanced
Signal Level	-65 to -25 dBm
LNB Power	13.5/18.5Vdc +/- 5%, 0.5Amax, Overload Protected
22KHz Tone	Frequency : 22KHz +/- 2KHz, 0.6Vpp +/- 0.2V
DiSEqC Control	Version1.0, 1.2, Tone burst A/B
Demodulation	QPSK, 8PSK
Input Symbol Rate	DVB-S QPSK : 2~45 Msps DVB-S2 8PSK/QPSK : 10~30Msps
FEC Decoder	1/2, 2/3, 3/4, 3/5, 4/5, 5/6, 8/9, 9/10 in DVB-S2 mode. 1/2, 2/3, 3/4, 5/6 and 7/8 in DVB-S mode.

III. Tuner & Channel(DVB-T)

Item	Specification
Type	IEC60169-2(VHF/UHF) female, 75? nominal
Frequency Rage	VHF : 170MHz to 230MHz UHF : 470MHz to 862MHz
Signal Level	-78.5dBm ~ -25dBm (64QAM, Code Rate 2/3, Guard Interval 1/8,Gaussian Channel)
COFDM Spectrum	COFDM 2K/8K-Carrier
FEC Mode	1/2, 2/3, 3/4, 5/6, 7/8

IV. System & Memory

Item	Specification
Main Processor	STi7100
Flash Memory	8 Mbytes
System Memory	128 Mbytes
A/V Memory	64 Mbytes
Channel Capacity	Digital Channel : 5,000
Front	7-Keys, 7-SEGMENT DISPLAY

SPECIFICATIONS

V. MPEG Transport Stream & A/V Decoding

Item	Specification
Transport Stream	13818-1 MPEG-2, H.264/AVC Transport stream Specification
Profile Level	MPEG-2 MP@ML, MP@HL, MPEG-4 H.264/AVC
Input Rate	Max. 90Mbit/s
Aspect Ratio	4:3, 16:9, Letter Box
Frame Rate	25Hz for PAL, 30Hz for NTSC
Video Resolution	576i, 576p, 720p, 1080i
Teletext	Through VBI or BSD
Audio Decoding	MPEG-1 Layer 1 & 2, Dolby Downmix
Audio Mode	Single Channel/Dual Channel Joint Stereo/Stereo
Frequency Response	20~20kHz, ←+/-2dB

VI. A/V & Date In/Out

Item	Specification
HDMI	HD Video/Audio Output
TV SCART Output	RGB, CVBS, L, R Output with Volume control
VCR Scart In/Out	RGB, CVBS, L, R In CVBS, L, R Out
RCA Output	CVBS, L, R Output(Yellow, White, Red Jack) with Volume Control Component Video(YPbPr) Out
SPDIF	Dolby Digital Bitstream Out(Coaxal, Optical)
Data Interface	- RS-232, Bit Rate : 115,200baud Connector : 9-pin D-sub Male type - USB : USB 2.0, Type A Connector

VII. Power Supply

Item	Specification
Input Voltage	AC 90V ~ 250V, 50Hz ~ 60Hz
Power Consumption	Max 40W
Protection	Separate Internal Fuse The input shall the lighting protection

VIII. Physical Specification

Item	Specification
Size(WxHxD)	290mm x 50mm x220mm
Weight	1.5 KG

IX. Environmental Condition

Item	Specification
Operating Temperature	0 °C ~ 40 °C
Storage Temperature	-10 °C ~ 50 °C
Operating Humidity Range	10~85% RH, Non-condensing
Storage Humidity Range	5~90% RH, Non-condensing

BRAND LIST

TV

BRAND	CODE NO.	BRAND	CODE NO.
A.R.Systems	0051 0601 1001 0701 0811	Alkos	0031
Accent	0011 0051 1001	Allorgan	0321 0351
Accuphase	1001 2551	Allstar	0051 1001
Adcom	1131	All-Tel	1881
ADL	2171	Ambassador	0251
Admiral	0141 0151 0221 0451 0661 0761	Amplivision	0351 0511 0681
Adyson	0341 0351	Amstrad	0011 0051 0251 0361 0451 0651 0691
AEA	0051 1001		0751 0771 0941 1001 1211 1981 2521
AEG	1061 2411	Anam	0011 0051 1001
Agashi	0341 0351 0451	Anam National	0051 1001 1221
AGB	0941	Andersson	2041
Agef	0141	Anglo	0011 0451
Aiko	0011 0031 0051 0101 0271 0341 0351	Anitech	0011 0051 0161 0451 0461 1001
	0451 0641 0691 0771 1001	Ansonic	0011 0051 0161 0171 0221 0421 0441
Aim	0051 0101 0331 0751 1001 1371 1551		0501 0681 0701 0741 1001 1271 2361
	1701		2521
Aiwa	1341 1361 2521 2541 2561	Apollo	0821
Akai	0011 0031 0051 0101 0261 0271 0331	Arcam	0341 0351
	0341 0351 0361 0451 0641 0691 0711	Arcen Ciel	0201
	0821 0831 0941 0961 1001 1051 1061	Ardem	0051 0861 1001 1171 1391
	1161 1211 1281 1311 1391 1401 1461	Aristona	0051 1001
	1521 1981 2261	Arthur Martin	0221
Akashi	0011 1861	ASA	0091 0141 0171 0181 0581
Akiba	0051 0361 0461 0811 1001	Asberg	0051 0161 1001
Akito	0051 1001	Asora	0011
Akura	0011 0051 0361 0451 0461 0751 1001	Astra	0051 1001
	1271 1391 2621	Asuka	0341 0351 0361 0451 0461 2521
Alaron	0341	ATD	1331
Alba	0011 0041 0051 0221 0341 0361 0421	Atlantic	0051 0321 0341 0441 0511 1001
	0621 0681 0691 0761 0781 0871 1001	Atori	0011
	1271 1391 1981 2521 2541	Auchan	0221

BRAND LIST

Audiosonic	0011 0051 0201 0351 0361 0451 0561 0681 0701 0861 1001 1391 1401
Audioton	0351 0451 0681 0861
Audioworld	1331
Aumark	0081
Autovox	0141 0321 0351 0421 0591
AVP	2521 2541
AWA	0011 0021 0041 0051 0191 0211 0341 0351 0451 0701 0751 1001 1061
Axxent	0011
Axxon	1391
B&D	2171
Baird	0101 0111 0201 0331 0351 2521
Bang&Olufsen	0141 1021
Barco	0221
Basic Line	0011 0051 0221 0351 0361 0461 0571 0701 0811 1001 1271 1981
Bastide	0351
Baur	0011 0051 0271 0301 0591 0641 0931 0951 0981 1001 1971 2381
Bazin	0351
Beaumark	0261
Beko	0031 0051 0681 0761 0861 1001 1391 1401 1711 1981 1061
Belson	2081
Bemmett	0051 1001
BenQ	2491
Beon	0051 0761 1001
Berthen	1271
Best	0561 0681
Bestar	0051 0681 0701 1001
Bestar-Daewoo	0701
Binatone	0351
Black Diamond	1001 1091 1731 1741 1981
Black Panther	0161
Black Star	0421
Black Strip	0031
Blacktron	0461
Blackway	0361 0461
Blaupunkt	0041 0241 0271 03010711 0951 0981
Blue Sky	0051 0361 0461 0811 0871 1001 1271 1391 1401 1981 2081 2521 2541 2551 2571
Blue Star	0461
Bondstec	0421
Boots	0011 0351
Bosch	0511
Boxlight	1491
BPL	0051 0461 1001
Brandt	0201 0471 0551 1011 1131
Brandt Electronique	0471 0551
Brinkmann	0051 0761 0861 1001 1271
Brionvega	0051 0141 0651 1001
Britannia	0341 0351
Brother	0451
Bruns	0141
BSR	0221 0641
BTC	0361
Bush	"0011 0041 0051 0221 0331 0351 0361 0451 0461 0591 0621 0641 0661 0691 0701 0871 1001 1091 1101 1251 1271 1331 1391 1621 1981 2211 2261 2411 2501 2521 2541 2561"
Canton	0361
Capsonic	0451
Carad	0051 1001 1081 1271 1981

BRAND LIST

Carena	0051 0811 1001
Carrefour	0041 0051 0091 1001
Carver	0241
Cascade	0011 0051 1001
Casio	0051 0221 0591 1001 2521
Cathay	0051 1001
CCE	0051 0351 1001
Celestial	1721 1731 1741
Centrex	1641 1761
Centrum	1981
Centurion	0051 1001
Century	0141 0391 0421
CGE	0221 0421 0681 0761 2521
Cimline	0011 0361
Cinex	1211 2411
Citizen	0081
City	0011
Clarivox	0051 0091 0161 0761 1001
Clatronic	0011 0051 0161 0351 0361 0421 0451 0511 0681 0691 1001 1061 1211 1391 2521
Clayton	1981
CMS	0341
CMS hightec	0351
Combitech	2541
Concorde	0011
Condor	0011 0051 0161 0221 0341 0421 0451 0461 0511 0681 0741 0751 1001
Conia	1561 1741
Conrad	0051 1001
Contec	0011 0021 0041 0051 0211 0341 0451 1001
Continental Edison	0201 0471 0871
Cosmel	0011 0051 0561 1001
Crosley	0141 0421 0221
Crown	0011 0051 0331 0571 0681 0761 0861 0871 1001 1061 1281 1381 1391 1401 1981 2571
CS Electronics	0341 0361 0421
CTC	0421
Curtis Mathes	0151 0231 0361
Cybertron	0361
Cytronix	2311
Daewoo	0011 0051 0341 0351 0361 0701 0911 1001 1181 1261 1821 1921 2001 2511 2541 2551
Dainichi	0341 0361
Dansai	0011 0031 0041 0051 0331 0341 0351 0451 1001
Dansette	0751
Dantax	0681 0861 1061 1391 1401 2541
Datsura	0331
Davis	1491
Dawa	0011 0051 1001
Daytek	1331 1371 2111
Dayton	2111
Daytron	0011 0051 0701 1001
de Graaf	0061 0221 0331 0661 0961
DEC	1661 1861
Decca	0051 0101 0351 0941 1001 1121 2001 2521 2541
Deitron	0051 0361 0701 1001
Dell	2271
Denko	0451
Denver	0051 1001 1041 1061 2071 2631
Desmet	0011 0051 0141 0511 1001

BRAND LIST

Diamant	0051 1001
Diamond	0011 0341 0451 0691 1311 1331 1691 1731 1751 1861
Digatron	0051 1001
Digiline	0051 0181 1001 1271
Digitex	1731
Digitor	0051 1001 1871 1931
Digivision	0641
DigiX	1921
DiK	0051 1001
Dixi	0011 0051 0141 0351 0421 1001
DL	0051 1041 1641 1831 1951
Domland	0731
Doric	0591
Dream Vision	2461
DSE	1871 1931 2411
DTS	0011
Dual	0051 0221 0351 0441 0591 0601 0731 1001 1161 2001 2521
Dumont	0091 0101 0141 0161 0171 0351 2521
Dunai	0221
Durabrand	0051 1001 2361
Dux	0051 1001
D-Vision	0051 1001
DVX	1951
Dynatron	0051 1001
Easy Leaving	2661
Easy Living	2661
Ecco	1371 1611
Edison-Minerva	0871
E-Elite	0361
Eiki	1481
Elbe	0051 0221 0271 0351 0361 0391 0441 0501 0641 0651 0681 0741 0781 0941 1001 1081 1151
Elbe-Sharp	0941
Elcit	0141 0161 0221 0421 0941
Elekta	0011 0051 0451 0461 1001
Elfunk	2121
ELG	0051 1001
Elin	0011 0051 0171 0181 0221 0341 0591 0641 0961 1001
Elite	0051 0361 0511 1001
Elman	0161
Elta	0011 0341 0451
Emco	0421
Emerson	0051 0091 0141 0221 0251 0261 0421 0461 0511 0521 0641 0681 0691 0861 1001 1391 2521 2551
Emperor	0461
Enzer	1311 1551
Epson	1811
Erres	0051 1001
ESC	0051 0351 1001
Est_le	0221
Etron	0001 0011 0051 0221 1001
Eurofeel	0351 0451
EuroLine	0051
Euroman	0051 0341 0351 0451 0681 1001
Europa	0051 1001
Europhon	0051 0161 0221 0341 0351 0421 0941 1001
Excel	0051 1001
Expert	0221 0321 0441
Exquisit	0051 0421 1001
Fagor	0051 1001

BRAND LIST

Family Life	0051 1001
Fenner	0011 0701
Ferguson	0031 0051 0111 0171 0191 0201 0391 0471 0551 0641 0781 0961 1001 1011 1131 1981 2521
Fidelity	0051 0221 0341 0451 0641 0661 0691 0751 0931 1001 2521 2531 2541
Filsai	0351
Finlandia	0071 0101 0221 0331 0471 0581 0641 0661 0961
Finlux	0051 0091 0101 0141 0161 0171 0181 0221 0351 0581 0741 0761 0821 0831 0891 0941 1001 1061 1121 1141 1161 1391 1401 2411
Firstline	0011 0051 0101 0161 0221 0331 0341 0351 0391 0421 0521 0591 0641 0701 0741 1001 1271 1391 1711 1981 2041 2081 2551
Fisher	0041 0071 0101 0141 0171 0211 0221 0331 0351 0591 0641 0681 0991
Flint	0051 0101 0361 0451 0811 1001 1081
FNR	0161
Force	2031
Formenti	0051 0141 0221 0341 0511 0861 1001
Formenti-Phoenix	0341 0511
Fortress	0141 0151
Fraba	0051 0681 1001
Friac	0011 0051 0161 0681 0911 1001 1081 1241
Frontech	0011 0221 0351 0421 0451 0591 0661
Fujimaro	1881
Fujitsu	0011 0051 0101 0161 0221 0321 0351 0441 0601 0641 1001 1301 1851
Fujitsu General	0011 0221 0321 0351
Fujitsu Siemens	2311
Funai	0451 0751 1271
Furichi	1861
Futronic	0451 1661 1861
Future	0051 1001
Galaxi	0161 0051 1001 0641 0221
Galaxis	0681 0761 1001 0161 0051
Galeria	0011
GBC	0011 0221 0361 0661 0701
GE	0201 0261 0461 0471 0551 1011 1131 1481
Geant Casino	0221
GEC	0051 0101 0221 0351 0591 0641 0941 1001
Geloso	0011 0221 0421 0661 0701
General	0201 0471
General Electric	0471
General Technic	0011
Genesis	0011 0051 1001
Genexxa	0011 0051 0221 0361 0751 1001
Gericom	1881 2171 1921 2311
Giant	0351
Goldfunk	1271
Goldhand	0341
Goldline	0561
GoldStar (LG)	0001 0011 0051 0061 0201 0221 0261 0341 0351 0421 0481 0641 0661 0681 0711 1001 1061 1391 1401 2571
Gooding	0871
Goodmans	0011 0031 0041 0051 0101 0351 0361 0451 0481 0551 0691 0701 0831 0871 0911 0941 1001 1011 1151 1181 1261 1271 1921 1981 2261 2501 2541 2551
Gorenje	0681

BRAND LIST

GPM	0361
Gradiente	0051 0241 1001
Graetz	0051 0221 0571 0641 0691 1001 1391
Gran Prix	1211
Granada	0041 0051 0071 0101 0191 0221 0331 0351 0371 0381 0551 0571 0631 0661 0821 0941 0961 1001 1011
Grandin	0011 0051 0221 0361 0461 0511 0701 0811 1001 1081 1271 1391 1401 1881 1981 2081
Gronic	0161 0221 0351
Grundig	0011 0041 0051 0091 0261 0271 0301 0681 0781 0871 0921 0951 0981 1001 1041 1151 1371 1501 2181 2321 2541 2561 2581
Grunkel	2041
H&B	1711
H_her	1391 2411 1881
Haaz	1371
Haier	0451 1331
Halifax	0341 0351 0451
Hammerstein	0081 0451
Hampton	0341 0351
Hanimex	0361 2541
Hanseatic	0011 0051 0141 0221 0351 0461 0501 0511 0591 0641 0681 0711 0731 0911 1001 1181 1261 1391 1711
Hantarex	0011 0051 0161 0391 0941 1001 1771
Hantor	0051 1001
Harsper	1881
Harwa	1611 2101 2291
Harwood	0011 0051 0751 0871 1001
Hauppauge	0051 1001
HCM	0011 0051 0351 0361 0451 0461 0751 0761 1001
Hedzon	0051 1001
Hema	0011 0351
Hemmermann	0591
Hifivox	0201
Higashi	0341
Highline	0051 0451 1001
Hikona	0361
Hinari	0011 0041 0051 0221 0331 0361 0451 0621 0781 0871 1001 2541
Hisawa	0361 0461 0811 1081 1391 2541
HISense	0331 1831
Hit	0141
Hitachi	0041 0051 0061 0101 0181 0191 0201 0221 0261 0291 0351 0371 0591 0631 0641 0661 0821 0831 0841 0891 0911 0931 0941 0961 1001 1031 1141 1181 1421 1511 1671 1981 1991 2001 2031 2191 2371 2421
Hitachi Fujian	0191 0371
Hitsu	0011 0361 0811 1081
HMV	0141
Home Electronics	1061
Homyphon	0051 1001
Hoshai	0361 0461 0811
Huanyu	0341 0701
Hugoson	1941 2171
Hygashi	0341 0351
Hyper	0011 0341 0351 0421
Hypersonic	0641
Hypson	0051 0351 0391 0451 0461 0811 1001 1271 1391 1401 2541 2571

BRAND LIST

Hyundai	0051 1001 1371 1551 1861 1881 1891 2221
Iberia	0051 1001
ICE	0011 0051 0341 0351 0361 0451 0691 1001
Ices	0341 0361
Ict	0051 1001 2001
Imperial	0051 0221 0421 0591 0641 0681 0741 0761 1001 1151
Indiana	0051 1001
InFocus	1491 1541 2051
Ingelen	0221 0641 0871 1081 1391 2341
Ingersoll	0011
Inno Hit	0011 0051 0101 0161 0351 0361 0451 0461 0481 0941 1001 2041
Innovation	0051 1001
Innowert	1881 2311
Interactive	0051 0141 0201 0221 0641 0681 0741 0931 1001
Interbuy	0011 0051 0421 0451 0931 1001
Interfunk	0051 0141 0201 0221 0421 0591 0641 0681 0931 1001
Internal	0051 0701 0911 1001 2551
International	0341
Intervision	0011 0051 0161 0221 0351 0361 0421 0451 0461 0681 0691 0711 1731 0811 0861 0871 1001
Irradio	0011 0051 0361 0421 0481 0691 1001
Isukai	0051 0361 0461 0811 1001
ITC	0351 0511
ITS	0011 0051 0341 0361 0451 0461 0691 1001
ITT	0221 0331 0571 0581 0591 0641 0821 0831 0961 1081
ITT Nokia	0221 0331 0571 0581 0591 0641 0661 0821 0831 0961 1061 1081 1161
ITV	0051 0421 0451 0701 1001
JDV	2621
Jean	0041
JEC	0031
JMB	0051 0701 0781 0911 1001 1181 2541
Jocel	1381
Jubilee	1001
JVC	0041 0151 0361 0691 0761 1061 1231 1301 1471
Kaisui	0011 0051 0341 0351 0361 0461 0811 1001
Kambrook	0711
Kamp	0341
Kapsch	0171 0221 0321 0441 0641
Karcher	0051 0161 0221 0451 0461 0681 1001 1061 1081 1391 1621 2411
Kathrein	0051 1001
Kawa	0691
Kawasho	0341
KB Aristocrat	0221
Kendo	0051 0161 0221 0421 0651 0661 0681 0711 0741 0931 1001 1081
Kennedy	0221 0321 0781
Kennex	1981
Kenwood	0181
KIC	0351
Kingsley	0341
Kiota	0001
Kiton	0051 1001 1271
Kneissel	0051 0391 0441 0501 0651 0681 0701 0741 0781 0911 1001 1081 2541

BRAND LIST

Kolster	0051 0161 0421 0591 1001
Konichi	0011
Konka	0051 0361 0691 0761 1001 1041 1191 1391 1561 1631
Kontakt	0871
Korpel	0051 1001
Korting	0141 0511 0681
Kosmos	0051 1001
Kotron	0451 0751
Koyoda	0011
Kraking	0391
KTV	0351
Kuba	0221 0591
Kuba Electronic	0221 0591
Kyoshu	0451 0751 0761
Kyoto	0221 0341 0351
L&S Electronic	1391 1881
LaSAT	0681 0861
Leader	0011
Lecson	0051 1001
Legend	0011 0561
Lemair	0741
Lenco	0011 0051 0171 0221 0701 1001 1431
Lenoir	0011
Lesa	0421
Levis Austria	0051 1001
Leyco	0051 0101 0451 1001
LG	0001 0011 0051 0201 0221 0261 0341 0351 0481 0681 0711 1001 1061 1331 1391 1401 1771 2011 2021 2081 2431 2571
Liesenk & Tter	0051 1001
Liesenkotter	0051 1001
Lifetec	0011 0051 0361 0451 0701 0931 1001 1241 1271 1301 1981 2001
liyama	2171
Lloyd's	0001 0011
Lodos	1981
Loewe	0051 0141 0501 0651 0681 0931 0941 1001 1171 1241 1651
Logik	0001 0011 0021 0081 0451 0691 1331 1611 1921 2171
Logix	1271
Luker	2621
Luma	0011 0051 0221 0321 0441 0651 0661 0701 0741 1001
Lumatron	0051 0111 0221 0321 0351 0441 0451 0641 0651 0661 1001
Lux May	0011 0051 1001
Luxor	0221 0291 0331 0351 0481 0591 0631 0641 0661 0821 0931 0891 0961 1161 1981 2041 0831
LXI	0261
Madison	0051 1001
Magnadyne	0141 0161 0221 0421 0941
Magnafon	0111 0161 0341 0941
Magnavox	0041 0051 1001 1641
Magnum	0051 1001 1211 1391 1401 2301
Mandor	0451
Manesth	0031 0051 0221 0351 0451 0511 0661 1001
Manhattan	0051 0221 1001 1271 1621 1981
Marantz	0051 0751 1001
Marelli	0141
Mark	0011 0051 0341 0351 0701 1001 1391 1401

BRAND LIST

Master's	0911
Masuda	0011 0051 0351 0361 0451 0691 1001
Matsui	0011 0021 0031 0041 0051 0071 0101 0221 0251 0271 0301 0331 0351 0551 0591 0621 0661 0691 0771 0781 0811 0871 0941 1001 1141 1391 1981 2541
Matsushita	1221
Matsuvisma	1041
Maxam	0451
Maxdorf	1611
Maxim	2411 2621
MCE	0011
Mediator	0051 1001
Medion	0051 0411 0931 1001 1271 1331 1391 1711 1921 1981 2001 2241 2301 2361 2501 2541
Megas	1081
Megatron	0261
MEI	0051 1001 1981
Melectronic	0011 0051 0171 0181 0201 0221 0271 0301 0341 0351 0421 0471 0581 0591 0641 0701 0741 0831 0891 0931 1001 1181 1261
Memorex	0011 0081 0261
Memphis	0011 0051 0101
Mercury	0001 0011 0051 1001
Merritt	0221 0641 0961
Metz	0051 0141 0271 0301 0671 0721 0801 0951 0981 1001 1041 1271 1531 1981
MGA	0051 0171 0261 0361 1001
Micromaxx	0051 1001 1151 1271 1711 1981
Microstar	1711
Mikomi	2031
Minato	0051 1001
Minerva	0091 0191 0271 0301 0871 0941 0951 0981
Minoka	0051 0751 1001
Mirror	2501
Mitsubishi	0041 0141 0151 0191 0261 0331 0951 1001 1981 2571 0931 0051
Mitsuri General	0221
Mivar	0341 0351 0481 0491 0501 0681 0941 1071
Monaco	0011
Morgan's	0051 1001
Motorola	0151
MTC	0081 0221 0341 0591 0641 0681 0931
MTlogic	1391
Multistandard	0161
Multitec	0051 0861 1001 1271 1981 2411
Multitech	0011 0051 0161 0341 0351 0421 0451 0591 0661 0681 0861 1001
Murphy	0101 0171 0221 0341
Musikland	0051 0361 0421 1001
Myryad	0051 1001
NAD	0221 0231 0261 0641
Naiko	0051 1001 1061 2621
Nakimura	0051 0701 1001
Naonis	0221 0661
NAT	0381
National	0381
NEC	0011 0021 0041 0051 0241 0351 0411 0511 0701 0811 0911 1001 1041 1261 1351 1591 2061 2461
Neckermann	0051 0141 0221 0271 0351 0421 0511 0591 0661 0681 0741 0751 0931 0981 1971 2381 1001

BRAND LIST

NEI	0051 0221 0561 0691 1001	Onwa	0161 0361 0691 0771 1051
Neovia	1881	Opera	0051 1001
Nesco	0421 2541	Optimus	0231 1221
Netsat	0051 1001	Optonica	0151
Network	0561	Orbit	0051 1001
Neufunk	0011 0051 0361 0461 1001 1081 1391	Orion	0011 0021 0051 0161 0251 0451 0511 0521 0621 0751 0781 0941 1001 1241 1391 1921 2541 2561 2611
New Tech	0011 0051 0351 1001		
New World	0361		
Nfren	1681	Orline	0051 0361 1001
Nicamagic	0341	Ormond	0051 1001 1271 1981
Nikkai	0011 0031 0041 0051 0101 0341 0351 0361 0451 0561 1001	Orsowe	0941
		Osaki	0051 0101 0351 0361 0451 0621 0701 0751 1001
Nikko	0261		
Nishi	0851	Osio	0051 0481 1001
Nobliko	0091 0161 0341	Oso	0361
Nogamatic	0201	Osume	0041 0051 0101 0211 0361 1001
Nokia	0201 0221 0331 0511 0571 0581 0591 0641 0701 0821 0831 0891 0961 1061 1081 1161	Otto Versand	0011 0041 0051 0151 0201 0271 0301 0351 0381 0421 0461 0511 0591 0641 0931 0941 0951 0981 1001 1971 2381
Nordic	0351	Pace	2541
Nordmende	0051 0201 0221 0301 0471 0551 1001 1011 1391	Pacific	0051 0781 1001 1391 1981 2001
		Pael	0341
Norfolk	0221	Palladium	0051 0141 0221 0271 0351 0421 0591 0661 0681 0741 0761 0981 1001 1151 1241 1391 1971 2001 2381
Normerel	0051 1001		
Novak	0051 1001		
Novatronic	0051 0181 0701 1001	Palsonic	0001 0051 0351 0361 0451 0711 0751 0761 1001 1331 1611 1631
Nurnberg	0221 0641		
NU-TEC	0811 1331	Panama	0011 0051 0341 0351 0421 0451 1001
Oceanic	0221 0331 0641 0821 0831 0961	Panashiba	0001
Odeon	0451	Panasonic	0001 0051 0191 0221 0381 0641 0671 0941 0961 1001 1221 1841 1851 2331 2441
Okano	0011 0051 0101 0451 0681 1001		
Omega	0451		
Omni	1331 1641 1761 1951	Panavision	0051 0741 1001

BRAND LIST

Papouw	0051 1001
Pathe Cinema	0221 0341 0391 0501 0511 0591 0681
Pathe Marconi	0201
Pausa	0011
Perdio	0051 0101 0221 0341 0461 0511 1001
Perfekt	0051 1001
Philco	0051 0141 0221 0421 0681 0761 1001
Philex	0221
Philharmonic	0351
Philips	0011 0051 0141 0271 0391 0701 0981 1001 1431 1441 1601 2231 2491
Phocus	2301 2321
Phoenix	0051 0101 0141 0221 0341 0511 0681 0861 1001
Phonola	0051 0141 0341 1001
Pilot	0051 1001 1371 1381
Pioneer	0021 0051 0201 0221 0231 0241 0471 0641 0681 0861 0931 1001 1291 1581
Pioner	0681 0861
Plantron	0011 0051 0451 1001
Playsonic	0051 0351 0571 1391 1401
Plus	1591
Policom	0091 0141 0161 0201 0221 0321 0391 0641 0951
Polytron	0461 1321
Poppy	0011
Portland	0701 2551
Powerpoint	0051 0871 1001 1331
Prandoni-Prince	0421 0641 0661 0941
Precision	0351
Premier	0011 0451
President	1861
Prima	0011 0451 0751
Princess	1331
Prinston	1981
Prinz	0101 0291 0591 0641
Profex	0011 0221 0641 0661
Profi	0011
Profitronic	0051 0161 1001
Proline	0051 0101 0521 0741 1001 1121 1131 1151 1181
Prosonic	0051 0341 0351 0681 0691 0701 1001 1271 1391
Protech	0011 0051 0161 0221 0351 0421 0451 0461 0561 0591 0761 0861 1001 1271 1981
Proton	0261
Provision	0051 0911 1001 1391 1981
Pye	0051 0141 0591 0701 0751 0981 1001
Pymi	0011
Quadral	0361
Quasar	0011 0421 1221 1881
Quelle	0011 0021 0041 0051 0091 0171 0181 0201 0211 0271 0301 0351 0421 0451 0481 0581 0591 0641 0931 0951 0981 1001 1271 1971 1981 2381
Questa	0041
R_Line	0051 0221 1001
Radialva	0051 0201 0221 0361 0471 0561 1001
Radiola	0051 0351 1001
Radiomarelli	0051 0141 0421 0941 1001
RadioShack	0051 0261 1001
Radiotone	0011 0051 0451 0681 0751 0761 1001 1211 1271 1981
Rank	0091
Rank Arena	0041 0211 1051 1551

BRAND LIST

RBM	0091
RCA	0151 0551 1011 1131 1551
Realistic	0261
Recor	0051 0761 1001
Rectiligne	0051 1001
Rediffusion	0041 0581 0641 0961
Redstar	0051 1001
Reflex	0051 1001 1271 1981
Relisys	1881 1981 1901 1911 2111 2131 2141 2151 2161 2281 2311
Reoc	1181 1391 2551
Revox	0051 0681 1001
Rex	0221 0321 0421 0441 0451 0661 0741
RFT	0051 0101 0141 0451 0501 0681 1001
Rhapsody	0341
Ricoh	0051 1001
Rinex	0761 1611
Roadstar	0011 0051 0361 0451 0461 0761 1001 1271 1981 2071 2341 2561
Robotron	0141
Rodex	0051 1001
Rover	0041 1901
Rowa	0011 0341 0351 0451 1041 1331 1381
Royal Lux	0551 0681 0751
Rukopir	0051 1001
Saba	0141 0201 0221 0471 0551 0641 0901 0941 0961 1011 1131 1391
Saccs	0391
Sagem	0461 0811 1081 1781
Saisho	0011 0021 0221 0251 0351 0451 0941
Saivod	0051 1001 1271 1381 2621 1981
Saka_	0221
Sakyno	0811
Salora	0221 0291 0331 0481 0571 0591 0631 0641 0661 0831 0941 0961 1121
Salsa	0551
Sambers	0161 0941
Samsung	0011 0051 0081 0101 0151 0221 0261 0331 0341 0351 0451 0481 0681 0851 1001 1041 1111 1131 1201 2201 2251
Sandra	0341 0351
Sanela	0391
Sansui	0051 0691 0811 1001 1051 1241 1371 1451 1461 1871 1931
Santon	0011
Sanyo	0011 0021 0041 0051 0071 0101 0171 0191 0211 0221 0241 0331 0341 0351 0501 0571 0681 0861 0991 1001 1351 1431 1481 2121
Save	0051 1001
Saville	2541
SBR	0051 1001
Schaub Lorenz	0591 0641 0701 0861 0961 1061 1391 2081
Schneider	0051 0221 0351 0361 0421 0441 0591 0601 0641 0691 0731 1001 1211 1271 1391 1981 2001 2541 2551
Scotland	0221
Scott	0261
Sears	0261
Seaway	1181
Seelver	0051 1001 1981
SEG	0011 0041 0051 0161 0221 0341 0651 0361 0421 0451 0591 0651 0871 1001 1181 1271 1981 2041 2341 2361 2551
SEI	0051 0141 0161 0221 0251 0321 0591 0941 1001 1971 2381

BRAND LIST

Sei-Sinudyne	0051 0141 0161 0321 0941 1001 1971 2381
Seleco	0041 0221 0321 0441 0451 0581 0651 0661 0691 0741 0781
Sencora	0011
Sentra	0011 0031 0361 0591
Serino	0151 0341 0811 1081
Sharp	0041 0151 0211 0431 0881 0941 1231 1581 2041 2091 2351
Shintoshi	0051 1001
Shivaki	0051 0261 0701 0781 1001
Show	0011 0101 0761
Siarem	0141 0161 0221 0941
Siemens	0051 0211 0271 0301 0641 0951 0981 1001
Siera	0051 1001 1041
Siesta	0681
Silva	0051 0341 0641 1001 1211
Silva Schneider	2411
Silver	0041 0051 0221 0641 0811 1001 1401
SilverCrest	0051 1001 1981
Singer	0011 0051 0141 0161 0221 0421 0551 0781 1001 2401
Sinotec	1611
Sinudyne	0051 0141 0161 0221 0251 0321 0591 0641 0941 1001 1971 2381 2541
Skantic	0631
Sky	0051 0261 0461 1001 1921
Skymaster	018
Skysonic	1311 1551
Sliding	1881
SLX	1271
Smaragd	0871
Soemtron	1881 2311
Sogera	0511
Solavox	0051 0101 0221 0641 0961 1001
Sonawa	0361
Soniko	0051 1001
Sonitron	0331 0351 0571 0681
Sonneclair	0051 1001
Sonoko	0011 0051 0351 0451 0461 1001
Sonolor	0221 0331 0461 0641 0961 1971 2381
Sontec	0011 0051 0681 1001
Sony	0021 0041 0051 0161 0211 0611 1001 1801 1971 2381 2451 2471
Sound & Vision	0051 0161 0361 0701 1001
Soundesign	0261
Soundwave	0051 0511 0761 1001 1401
Spectra	0011
Ssangyong	0011
Staksonic	0011
Standard	0011 0051 0351 0361 0511 0701 1001 1981
Starlite	0011 0051 0221 0451 0751 1001
Stenway	0361 0461
Stern	0221 0321 0441 0451 0661 0741 0781
Stevison	2411 2621
Strato	0011 0051 0451 1001
Strong	0051 1001 1981 2031 2041
Stylandia	0351
Sunic Line	0051 1001
Sunkai	0051 0361 0521 0621 0811 0871 1001 1081 1881
Sunstar	0011 0051 0451 0691 1001
Sunwood	0011 0051 1001
Superla	0341 0351 0941

BRAND LIST

Supersonic	0331 0451 1001 1331 1701
SuperTech	0011 0051 0341 0361 1001
Supra	0011 0261 0701
Susumu	0361 0471 0551
Sutron	0011
Svasa	1701
Swissline	0421
Sydney	0341 0351
Symphonic	2521
Sysline	0051 1001
Sytong	0341
T+A	0801
Tandberg	0201 0221 0561 0641 0651 0671 0741
Tandy	0101 0151 0221 0351 0361 0421
Tashiko	0041 0221 0241 0341 0351 0661
Tatung	0021 0051 0101 0351 0941 1001 1121 1141 2411 1291 2541
TCM	1391
Teac	0011 0051 0241 0261 0351 0451 0461 0591 0751 0761 0811 0931 1001 1271 1331 1371 1381 1391 1431 1571 1981 2031 2361 2481 2551 2601
TEC	0011 0051 0221 0351 0421 0441 0551 0561 0641 1001
Tech Line	0051 1001 1271 2361
Techica	0361
Technema	0511
TechniSat	0051 0221 1001 1241
Technisson	1391 2301
Technosonic	0051 1001
Techwood	2041
Tecnimagen	1001
Tedelex	0011 0051 0331 0351 0761 1001 1041 1061 1331 1371 1951 2401
Teiron	0011
Teknika	0081
Teleavia	0201 0471
Telecor	0051 0221 0351 0361 0441 0731 1001
Telefunken	0051 0111 0201 0471 0551 0861 0901 1001 1011 1041 1131 1381 1391 1731 1961 1331
Telefusion	0051 1001
Telegazi	0051 0221 0361 0441 0451 1001
Telemeister	0051 0511 1001
Telesonic	0051 1001
Telestar	0011 0051 0751 1001
Telesystem	1891
Teletech	0011 0051 0421 0561 1001 1271 1981
Teleton	0041 0221 0321 0351 0441 0591 0661
Televideon	0221 0341 0511
Teleview	0051 1001
Telexa	0161
Tempest	0011 0051 0451 1001
Tennessee	0051 1001
Tensai	0011 0051 0171 0181 0221 0351 0361 0421 0511 0691 0701 0711 1001 1401 1981
Tenson	0011 0511
Tesla	0051
Tevion	0051 1001 1211 1271 1391 1981 2001 2241 2301 2311
Texet	0011 0341 0351 0361 0701
Thomas	2521
Thomson	0051 0201 0471 0551 0591 1001 1011 1131
Thorn	0021 0031 0041 0051 0071 0091 0101 0111 0171 0191 0201 0371 0391 0551 0631 0641 0701 0911 0931 0951 0971 1001 1971 2381

BRAND LIST

Thorn-Ferguson	0031 0111 0171 0191 0201 0391 0551 0641 0911
Tiny	2101 2291
Tiny Digital	1251
TMK	0251 0361
Tobishi	0361
Tokai	0011 0051 0101 0221 0351 0561 0701 1001 1271 1981
Tokaido	1981
Tokyo	0031 0341
Tomashi	0361 0461
Tongtel	1041 1641
Toshiba	0011 0031 0041 0051 0081 0091 0161 0201 021 2301 2541 2561 2591
Towada	0161 0351 0591
Toyoda	0011 0451 0691
Trakton	0011 0351 0451
Trans Continens	0051 0351 0861 1001 1271 1981
TRANS-continents	1121
Transonic	0011 0051 0451 0761 0811 0931 1001 1041 1331 1381
Transtec	0341
Triad	0051 0361 1001
Trical	0211
Trident	0351 0941
Tristar	0361 0451
Trumph	0051 0251 0581 0941 1001
Tsoschi	0461
TVTEXT 95	1001
Uher	0051 0321 0441 0511 0681 0701 0761 0831 0861 1001
Uitravox	0051 0161 0221 0341 0421 0701 1001
Unic Line	0051 0591 0811 0821 1001
United	0051 1001 1391 1401 2541 2561
Universal	0051 1001
Universum	0011 0021 0041 0051 0091 0171 0181 0201 0211 0221 0241 0251 0301 0351 0421 0451 0481 0561 0581 0591 0641 0651 0681 0741 0761 0821 0831 0891 0931 0951 0981 1001 1161 1271 1971 1981 2041 2341 2361 2381
Univox	0051 0141 0221 0391 0561 1001
Utax	0221
V7Videoseven	2481 0261 1921
Vestel	0051 0221 0351 1001 1271 1981 2041
Vexa	0011 0051 1001
Videologic	0341 0361
Videologique	0341 0351 0361
Videosat	0421 1
VideoSystem	0051 1001
Videotechnic	0341 0351 0511 0701
Videoton	0221 0631
Vidikron	0161 1481
Vidtech	0041 0261
Viewpia	1891
Viper	0561
Visiola	0341
Vision	0051 0351 0451 0511 1001
Vistar	0321 0641
Vortec	0051 1001
Voxson	0051 0141 0221 0261 0661 0761 1001
Waltham	0051 0201 0351 0471 0631 0761 1001 1271 1981
Watson	0011 0051 0221 0361 0511 0731 1001 1981 2361 2541 1271
Watt Radio	0161 0221 0341 0591

BRAND LIST

Wega	0041 0051 0141 1001
Wegavox	0011 0051 1001
Welltech	1391
Weltblick	0051 0351 0511 1001
Weston	0051 1001
Wharfedale	0051 1001 1871 1961 2411
White Wwatinghouse	0051 0341 0511 0561 1001 2551
Windsor	1271 1981
Windstar	0461 0561
Windy Sam	1001
Wintel	1391
World-of-Vision	1881 1901 1921 1941 2301 2311
Worldview	0071 0811
Xenius	1181
Xlogic	1331 1861
Xoro	2101 2171 2211
Xrypton	0051 1001
X-View	2081
Yamaha	1221 1671
Yamishi	0051 0351 0361 0461 0811 1001
Yokan	0051 1001
Yoko	0011 0051 0341 0351 0361 0421 0451 0571 0681 1001
Yorx	0361
Zanela	0391
Zanussi	0321 0351 0661
Zenith	2551
Zenor	0571
ZX	2541

VCR

Accent	0132
Accuphase	0342
Adyson	0132
Aim	0202 0262 0352
Aiwa	0002 0012 0032 0062 0212 0262 0272 0362 0372 0402 0412
Akai	0032 0062 0162 0192 0222 0262 0272 0352
Akashi	0132
Akiba	0132
Akura	0062 0132
Alba	0002 0132 0142 0202 0222 0262 0272
Allorgan	0192
Allstar	0142
Amstrad	0002 0132 0202
Anitech	0132
Ansonic	0002
Aristona	0142
ASA	0032 0142
Asuka	0002 0032 0042 0132 0142
Audiosonic	0202
AVP	0002 0272
AWA	0032 0082 0202 0352
Baird	0002 0062 0152 0162 0202
Basic Line	0132 0152 0202
Beko	0152
Bestar	0202
Black Diamond	0202 0352
Black Panther	0202
Blaupunkt	0022 0142 0182 0462
Blue Sky	0002 0032 0132 0202 0262 0272 0292 0352 0412
Bondstec	0132
Brandt	0062 0232 0242
BrandtElectronique	0062

BRAND LIST

Brinkmann	0262	Etzuko	0132
Bush	0002 0132 0142 0202 0222 0262 0272 0352 0372	EuroLine	0262
		Ferguson	0002 0062 0202 0232 0242
Carena	0142	Fidelity	0002 0132 0192 0272 0282
Carrefour	0092	Finlandia	0002 0072 0142 0152 0172
Casio	0002	Finlux	0002 0072 0142 0152
Cathay	0202	Firstline	0032 0072 0082 0092 0132 0202 0262 0412
CGE	0002 0062		
Cimline	0132	Fisher	0042 0102 0152
Clatronic	0002 0132	Flint	0262
Combitech	0272	Frontech	0132
Condor	0202	Fujitsu	0002
Crown	0032 0132 0202 0292	Fujitsu General	0032
Cyrus	0142	Funai	0002
Daewoo	0092 0202 0262 0272 0342 0352	Galaxi	0002
Dansai	0132 0202	Galaxis	0202
Dantax	0272	GE	0232
Daytron	0202	GEC	0142
de Graaf	0072 0112 0142 0152 0172	General Technic	0262
Decca	0002 0062 0122 0142 0262 0272	Genexxa	0152
Deitron	0202	Goldhand	0132
Denko	0132	GoldStar	0002 0032 0292
Diamant	0032	Goodmans	0002 0032 0132 0142 0192 0202 0262 0272 0342 0352
DSE	0352		
Dual	0002 0062 0142 0202 0262	GPX	0032
Dumont	0002 0142 0152	Graetz	0062 0152 0192
Elbe	0042 0202	Granada	0002 0032 0072 0112 0142 0152 0182 0192
Elcatech	0132		
Elin	0192	Grandin	0002 0032 0132 0202
Elsay	0132	Grundig	0022 0132 0142 0182 0232 0262 0272 0372
Elta	0132 0202		
Emerson	0002 0092 0132	H_her	0202 0352
ESC	0192 0202	Haaz	0262

BRAND LIST

Hanimex	0272	Kneissel	0032 0202 0262 0272
Hanseatic	0032 0042 0142 0202	Kolster	0262
Hanwood	0132	Korpel	0132
HCM	0132	Kuba	0102
Hinari	0062 0132 0192 0202 0272	Kuba Electronic	0102
Hisawa	0272	Kuwa	0182
Hischito	0092	Kyoto	0132
Hitachi	0002 0062 0072 0142 0152 0172 0192	Lenco	0202
	0322	Leyco	0132
Hornyphon	0142	LG	0002 0032 0202 0292 0412
Hypson	0002 0032 0132 0202 0272 0292	Lifetec	0262
Imperial	0002 0192	Loewe	0032 0142 0182 0462
Ingersoll	0192	Logik	0132 0162 0192
Inno Hit	0132 0192 0202	Lumatron	0202 0322
Interbuy	0032 0132	Lux May	0132
Interfunk	0142 0152	Luxor	0082 0102 0112 0132 0152 0162 0222
Internal	0202 0342	Magnavox	0142 0352
International	0032 0202	Magnum	0352
Intervision	0002 0032 0202 0262	Manesth	0092 0132 0142
Irradio	0032 0132 0142	Marantz	0042 0142
ITT	0062 0152 0162 0192	Mark	0002 0202
ITT Nokia	0112	Mastec	0352
ITV	0032 0202	Master's	0202
JMB	0262 0272	Matsui	0002 0322 0192 0262 0272 0372
Joyce	0002	Mediator	0142
JVC	0062 0122 0302	Medion	0262 0272
Kaisui	0132	Melectronic	0002 0032 0042
Kambrook	0032	Memorex	0002 0032 0102 0112 0152
Karcher	0202	Memphis	0132
Kendo	0032 0132 0162 0202 0222 0262	Metronic	0142
Kenwood	0042 0062	Metz	0032 0142 0182 0382 0462
KIC	0002	Micormay	0262
Kimari	0102	Micromaxx	0262

BRAND LIST

Migros	0002	Pathe Cinema	0082
Mitsubishi	0002 0082 0122 0142 0292 0352	Pathe Marconi	0062
Multitec	0032	Perdio	0002
Multitech	0002 0132 0152	Philco	0042 0132
Murphy	0002	Philips	0142 0322 0432 0442
Myryad	0142	Phoenix	0202
NAD	0152	Phonola	0142
Naiko	0262 0352	Pioneer	0072 0122 142 0472
National	0182 0462	Portland	0202 0342
NEC	0032 0042 0052 0062 0122 0152 0202	Prinz	0002
	0412	Profitronic	0142 0192
Neckermann	0062 0142	Proline	0002 0202 0232 0242 0352
Nesco	0002 0132 0272	Prosco	0202
Neufunk	0032	Prosonic	0002 0222
Nikkai	0132 0202	Protech	0142 0202
Nokia	0062 0072 0112 0142 0152 0162 0192	Provision	0202
	0202 0222	Pye	0002 0142
Nordmende	0062 0122 0232 0242	Quasar	0202
NU-TEC	0262	Quelle	0142
Oceanic	0002 0062 0112 0142 0152 0162	Radialva	0032 0112 0132 0142
Okano	0132 0202 0222 0262	Radiola	0142
Onimax	0352	Radionette	0032 0412
Orbit	0132	Rank	0062
Orion	0262 0272 0372 0452	Rank Arena	0062
Orson	0002	RCA	0232
Osaki	0002 0032 0132	Reoc	0202 0262 0342
Osume	0132	Rex	0062
Otto Versand	0142	RFT	0132
Pace	0272	Roadstar	0032 0132 0142 0192 0202 0372
Pacific	0002	Royal	0132
Palladium	0032 0062 0132 0192 0222 0262 0282	Saba	0062 0202 0232 0242
Palsonic	0002 0132 0352	Saisho	0262
Panasonic	0182 0382 0422 0462	Salora	0082 0152 0162

BRAND LIST

Samsung	0192 0282 0332	Soundwave	0032 0262
Sansui	0062 0122 0132 0162 0262	Ssangyong	0132
Sanyo	0102 0112 0122 0152	Standard	0202
Saville	0192 0202 0272	Starlite	0032 0152
SBR	0142	Stern	0202
ScanSonic	0192	Sunkai	0202 0262
Schaub Lorenz	0002 0062 0152 0162 0222	Sunstar	0002
Schneider	0002 0032 0072 0132 0142 0192 0202	Suntronic	0002
	0272 0352	Sunwood	0132
Seaway	0202	Supra	0032 0192 0262
SEG	0132 0142 0192 0202 0342 0352 0392	Symphonic	0002 0132
SEI	0142	T+A	0182
Sei-Sinudyne	0142	Tandberg	0202
Seleco	0032 0062	Tashiko	0002 0032 0112 0142 0192
Sentra	0132	Tatung	0002 0062 0082 0112 0142 0262 0272
Setron	0132	Tchibo	0262
Sharp	0032 0112 0312	TCM	0262
Shintom	0132 0152	Teac	0002 0032 0062 0132 0142 0202 0212
Shivaki	0032		0322 0342 0352
Siemens	0032 0142 0152 0232	TEC	0132 0202
Siera	0142	Tech Line	0132
Silva	0032	Technics	0182
Silver	0202	TechniSat	0262
Singer	0092 0262	Tedelex	0032 0262 0352
Sinudyne	0142 0272	Teleavia	0062
Smaragd	0262	Telefunken	0062 0202 0232 0242 0352
Sonitron	0102	Telestar	0032
Sonneclair	0132	Teletech	0002 0132 0202
Sonoko	0202	Tenosal	0132
Sonolor	0112	Tensai	0002 0032 0132 0202
Sontec	0032 0202	Tevion	0262 0352
Sonwa	0352	Texet	0202
Sony	0012 0022 0162 0402	Thomson	0062 0122 0202 0232 0242

BRAND LIST

Thorn	0032 0062 0152
Thorn-Ferguson	0232
Tokai	0032 0062 0132 0152
Tokiwa	0132
Topline	0262
Toshiba	0062 0082 0092 0142 0272 0372
Towada	0132
Tradex	0142
Tredex	0202
Triad	0202
Uher	0032 0192
Ultravox	0202
Unitech	0192
United	0262 0372
United Quick Star	0202
Universum	0002 0032 0142 0152 0162 0192 0262 0392
Victor	0122
Video Technic	0002
Watson	0142 0202 0272 0352
Weltblick	0322
Wharfedale	0322 0352
World	0262
Yamaha	0622
Yamishi	0132 0202
Yokan	0132
Yoko	0032 0132 0192
Yoshita	0132
Zenith	0342
ZX	0262 0272

DVD

3DLAB	0073
4Kus	1163
Acoustic Solutions	0333 0383 1383 1843
AEG	0503 0553 0573 1783
AFK	1123 1283 1333
Aim	0293
Airis	0233 0863 1313 1443 1523 1543 1623
Aiwa	0053 0173 0283 1763 1073 1393
Akai	0273 0313 0333 0473 0533 0573 0713 0823 0843 0973 1053 1073 1353 1583 1693 1933 0553
Akashi	0663
Akira	0293
Akl	0363 0723
Akura	0843 0923 1083 1223 1233 1633
Alba	0073 0233 0283 0293 0333 0353 033 0383 0543 0923 1083
Alize	1113
All-Tel	0533 1863
Amitech	0503 0703
Amoi	0713
Amoisonic	0463 0653
Amstrad	0333 1053
AMW	0783
Ansonic	0443 0623
Apex Digital	0233 0933
Arena	0713
Aria	0833
Arianet	0833
Asono	1313
ATACOM	1313
ATD	0363
A-Trend	0343
Audiosonic	0273

BRAND LIST

Audioworld	0573	Centrum	0333 0533 0563 0833 0863
Audix	0973 1023	CGV	0423 0503
Auvio	0693 0993	Cinea	0683
Avious	1203	Cinetec	0333 0783
AWA	0383 0783	cineULTRA	0293
Axion	0383	Clairtone	1433
Baier	0433	Classic	0383 1943
Base	1863	Clatronic	0233 0533 0553 0603 1203
Basic Line	0333	Clayton	0333
Baze	0233 0843 1203	clio	1513
BBK	0743 0983 1313 1873	Coby	0383 1033
Bellagio	0783 1403	Codex	1353
Belsonic	1703	Compacks	1623
Best Buy	0733	Conia	0023 0233 0463 0653 0713 1523
Black Diamond	0333 0473 0643 0823 1553	Contel	0553
Blaupunkt	0353	Continental Edison	0623 0783 1433
Blue Sky	0193 0233 0283 0293 0333 0493 0693	CrossWood	1133
	1703	Crown	0193 0273 0493 0503
BlueTinum	1243	Crypto	1333
BNI	1523	C-Tech	0483 1123
Boghe	0853 1293	CVG	1213
Boman	0543 0553 0843	cybercom	0623
Brainwave	0503 1053 1363	CyberHome	0343 0593 0803 0893
Brandt	0013 0083 0193	Cytron	0193 0313 0623 1573
Britannia	0413	Daenyx	0783
Bush	0023 0263 0273 0283 0293 0333 0353	Daewoo	0313 0343 0503 0633 0643 0773 0783
	0373 0383 0603 0623 0643 0813 0823		1093 1213
	1203 1803 0933	Daewoo international	0293 0783
Cambridge Audio	0423 0983 1043	Dalton	0903
CAT	0293 0563 1643	Dansai	0503 0543 1053
Celestial	0233	Dantax	0283 0373
cello	1823 1893	Daytek	0783 0863
Centrex	0233 0853	Dayton	0783

BRAND LIST

DCE	0623
DEC	0293 0603
Decca	0503
Denon	0003 0163 1923
Denver	0293 0553 0603 0843 0973 1033 1493 1523 1733 1763 1853
Denzel	0213
Diamond	0193 0373 0423 0483
Digihome	0333
digiRED	0353
Digitali	0833
Digitor	0863 0273
Digitrex	0233 0853 0933
Dik	0623
Dinamic	0553
DiviDo	0313
DK digital	0623 0673 1413 1453
DL	0723
DMTECH	0543 0573 1003
Dragon	0623
DSE	0643 1123 1693 1643
Dual	0193 0213 0333 0383 0533 0543 0573 0623
Durabrand	0623
D-Vision	1053
DVX	0483
Eagletec	0343
Easy Home	0733
eBench	1123
E-Boda	0373
Eclipse	0373 0423
E-Dem	1313
Electrohome	0503
Elfunk	0703
Elin	0503
Ellion	0703 1773
Elta	0273 0503 0553 0573 1053 1113
Eltax	0473 1503 1513 1523
Emerson	0123 0313
Encore	1723
Energy Sistem	1583
Enzer	0213 0473
EuroLine	0553 0973 1053 1353
Eurostar	1693
Fenner	1693
Ferguson	0193
Finlux	0123 0233 0393 0423 0503 0543 1103 1203
Fintec	0333 1213
Firstline	0193 0763
Funai	0243 0283
GE	0353
Germatic	0923
Giec	1293 1643
Global Solutions	0483
Global Sphere	0483
Go Video	0543
GoldStar	0393
Goodmans	0193 0273 0333 0373 0383 0423 0543 0573 0603 0643 0813 0853 1083 1293 1453
GP Audio	1083
Graetz	0213
Gran Prix	0623
Grandin	0233 1453
Grunding	0073 0193 0223 0253 0283 0313 0333 0373 0573 0853 1933 1943

BRAND LIST

Grunkel	0503 1143	Karcher	0543
GVG	1213	Kendo	0293 0333 0623
H&B	0333 0603 0683 0703 1353 1363 1773	Kennex	0333 0503 0673 0843
H_her	0623 1313	Kenwood	0003 0063
Haaz	0423 0483	KeyPlug	0503
Haier	0693 0993	Kiiro	0363 0503 0723
Hanseatic	0393 0543 0573 1133	Kingavon	0603
Harman/Kardon	0303	Kiss	0213 0683
HCM	0553	Koda	0603 1343
HDT	0313	Koss	0193
HE	0383	KXD	0733 1523
Hen_	0333	Lawson	0313 0483
Himage	1173	lekei	1553
HiMAX	0693 0733	lenco	0193 0293 0333 0503 0603 0623 1203
Hiper	1423	Lenoxx	0273 0663
Hitachi	0113 0203 0213 0333 0533 0733	Lexia	0293
Hiteker	0233 1153	LG	0123 0393 0763
Home Electronics	0383	Lifetec	0193 0623 1573
Home Tech Industries	1313 1863	Limit	0483
Hyundai	0473 0543 0703 1143 1333 1713	LiteOn	0943 1163 1743 1883
ICP	1133	Lodos	0333
Ingelen	0553	Loewe	0073 0393
ISP	0283	Logiclab	0483
JBL	0303	Logix	0313 0543 1013
JDB	0383	Luker	1633
JDV	1333 1633	Lumatron	0313 0333 0383 0393 0643 0843 1003
Jeken	0293		1053 1523
Jepssen	1263 1443	Luxman	0113
JMB	0283	Luxor	0333 0383 0853 1043 1943
JVC	0013 0073 0093 0133 0753 1193 1373	Magestic	1033
jWIN	0923	Magnavox	0013 0073 0243 0333 0603 1083
Kansai	1023	Magnex	0373 1203
kansas Technologies	1353	Manhattan	0313 0333

BRAND LIST

Marantz	0073	Mitsubishi	0333
Maraton	1153	Mizuda	0603 0733 1863
Mark	0283 0333 0823 1933	Monbel	1693
Marquant	0503	Monyka	0213
Mastec	0873 1783	MP	0693
Matrix	1383	MPX	0693
Matsui	0193 0233 0333 0283 0823 1943	Mtlogic	1473
Maxdorf	0553	Mustek	0383 1943
Maxim	0333 1383 1693	Mx Onda	0193 1373 0423 1253 1303 1453
MBO	0273 0383	Myryad	1453
MDS	0293	Mystral	0623 1143
Mecotek	0503	NAD	0393
Mediencom	0413 0723	Naiko	0503 0853 1633
Medion	0143 0193 0543 0623 0813 0993 1563	NEC	0123 0763
	1573	Neufunk	0213
MEI	0573	Nevir	0503 0623
Memorex	0623	Nintaus	0583 0923
Memory	0383 0923 0973	Nordmende	0623
Metz	0043 0103 0333	Noriko	0433
MiCO	0373 0423 1253 1293 1303 1453	Nowa	0693
Microboss	0363	NU-TEC	0023 1333 1823
Micromaxx	0283 1573 1933	Okano	0433
Micromedia	0013 0073	Omni	0273 0293 0413 0643 0673 1023 1333
Micromega	0073		1543
Microsoft	0033	Onix	0663
Microstar	0623	Onkyo	0013
Minato	0433	Oopla	1163
Minax	0333	Optim	0693
Minerva	0313	Optimus	0043 0103
Minix	1983	Orava	0603
Minoka	0503	Orbit	0783
Minowa	1203	Orion	0283 0873 1063 1353 1933
Mirror	0433 0813	Oritron	0193

BRAND LIST

OTIC	1553	Red Star	0443 0453 0503 0553 0843 1033 1563
P&B	0603 1863		1793
Pacific	0333 0433 0483 0573 0623	Relisys	1573
Palladium	0283 0533	Reoc	0433 0483
Palsonic	0233 0263 0653 0713 0933	Revoy	0293 0683
Panasonic	0033 0883	Rex	0663
Panda	0353 0543	Rimax	1113
Papouw	0053	Ritech	1613
peeKTON	0843 1313 1833	Roadstar	0263 0273 0293 0333 0383 0603 0643
Philips	0013 0073 0183 0243 1163 1953		0843 0923 1583
Philo	1563	Ronin	0323 0783
Phonotrend	0293 1203	Rotel	0093 0133
Pioneer	0043 0103 0153 1903	Rowa	0023 0043 0353 0443 0853 1153
Playgo	1473	Rownsonic	0373 0563
Plu2	0703	Saba	0083 0193 1493
Pointer	0503	Sabaki	0483
Portland	0273 0503	Saivod	0443 0503 0623 1633
Powerpoint	0363 0723 0783	Salora	0393
Prima	0473 1333 1823	Sampo	0433
Prima Electronic	0473	Samsung	0003 0113 0403 0613 0963
Prinz	0623	Sansui	0283 0373 0423 0483 0503 1333 1343
Prism	0873 1133		1553 1933
Prodisma	0723	Sanyo	0223 0283 0333 0573 0793
Proline	0193 0233 0253 0323 0573 0643 1853	Scan	0313 0653 0703
Proscan	0033	ScanMagic	0383 1943
Proson	0333 0983	ScanSonic	0733
Prosonic	0293 0433 1033 1213 1593	SCE	0563
Provision	0293 0603 1183	Schaub Lorenz	0503 0553 1363
Radionette	0393 0763	Schneider	0543 0193 0313 0333 0533 0553 0573
Raite	0213		0623 1013 1133
Rank Arena	0363 1253	Schwaiger	0433
RCA	0033 0193 0493	Scientific Labs	0483 1543
REC	0003 0263 0413 0473	Scott	0193 0233 0363 0723 0903 1353

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Seeltech	1313 1543	Stevison	1633
SEG	0213 0333 0453 0483 0783 0823	Strong	0333
Shanghai	0233	Sumvision	1823
Sharp	0143 0283 0333 0433 1643 1753	Sunfly	0733
Sherwood	0353 0393	Sunkai	0503 0703
Shinco	0353	Sunwood	0553
Sigmatek	0733 1313	SuperTech	1443
Silva	0553 0623 0823	Supervision	0383 0483
Silva Schneider	0623	SVA	0233 0433
Singer	0273 0373 0423 0483	Synn	0483
Sinotec	0463	T.D.E Systems	1143
Skymaster	0383 0483	Tandberg	0333 7933
Skysonic	0473	Tangent	1513 1523
Skyworth	0473 0843	Targa	0393 1323
Slim Art	0503	Tatung	0503
Slim Devices	0053	Teac	0023 0103 0123 0353 0393 0443 0483
SM Electronic	0273 0383 0483		0573 0643 0873 1273 1323 1653 1683
Smat	0313 0333 0363	TEC	0843
Sogo	0723	Technica	1003 1243
Sonashi	0623	Technics	0003
Soniko	0553	Technika	0503 0623 1003 1053 1203
Sontech	1143	Technosonic	0923 1053
Sony	0053 0113 0513 0953 1913	Techwood	0073 0333
Sound Color	1353	Tedelex	0273 1333
Sound master	0483	Telefunken	0553 0563 0573 0973
Soundmax	0483	Teletech	0333
Soundwave	0543	Tensai	0193 0273 0503
Spectra	0783	Tevion	0193 0483 0643 0903 1323 1673
Standard	0193 0483 0553 0623 0843	Theta Digital	0103
Star Cluster	0483 1123	Thomson	0033 0083 1663
Star Clusters	0483 1323	Tokai	0213 0553 1843
Star Sound	1823	Tokiwa	0313
Starmedia	0603 0833 0863 1313	Tom-Tec	0563 1853

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Tongtel	0463
Top Suxess	1313
Toshiba	0013 0913 1963
TRANS continents	0623 0783 1203 1533
Transonic	0233 1203 1813
Tredex	0693
Trio	0503
Truvision	0733 1863
TSM	1313
Umax	0273 1113
United	0233 0283 0293 0383 0483 0553 0573 0973 1003 1053 1203 1243 1333 1353 1553 1833
Universal Multimedia	0483
Universum	0123 0333 0393 0533 0573 1323
Uptek	0453
upXus	1483 1563
Venturer	0573
Vestel	0333
Vieta	0313 1473
Viewmaster	0743 0983 1313
Voxson	0273 0383 0623
Vtrek	1333
Waitec	1313
Walkvision	0353
Welkin	0623
Wellington	0333
Welltech	1293
Weltstar	0333
Wesder	0293
Wharfedale	0253 0373 0423 0433 0483
Wilson	0623 1353
Windy Sam	0113
Wistar	1813
Woxter	1113 1313 1543
Xbox	0033
Xlogic	0483 0503
XMS	0263 0503 0553
Xoro	1243 1263 1293 1423 1433 1443
Yakumo	0853 0933
Yamada	0783 0853 0933 1113 1163 1743
Yamaha	0003 0073 0183
Yamakawa	0213 0323 0783 1023
Yelo	0363
Yukai	0383
Zenith	0013 0123 0303
Zennox	1473

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